

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
PB-288 720

Water Resources Data for Ohio
Water Year 1971. Part I
Surface Water Records

(U.S.) Geological Survey, Columbus, OH Water Resources Div

1972

PB 288720

1971

**Water Resources Data
for
Ohio
Water Year 1971**

Part 1. Surface Water Records



REPRODUCED BY
**NATIONAL TECHNICAL
INFORMATION SERVICE**
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

**UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-71-1**

Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1971

OCTOBER 1970

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER 1970

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER 1970

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

JANUARY 1971

S	M	T	W	T	F	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY 1971

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

MARCH 1971

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

APRIL 1971

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

MAY 1971

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JUNE 1971

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

JULY 1971

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST 1971

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER 1971

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

BIBLIOGRAPHIC DATA SHEET	1. Report No. USGS/WRD/HD-78/278	2.	3. Report Number FB288720
4. Title and Subtitle Water Resources Data for Ohio Water Year 1971 Part 1. Surface Water Records		5. Report Date 1972	
7. Author(s)		8. Performing Organization Rept. USGS-WDR-OH-71-1	
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 975 West Third Avenue Columbus, OH 43212		10. Project/Task/Work Unit No.	
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 975 West Third Avenue Columbus, OH 43212		13. Type of Report & Period Covered Oct. 1, 1970 to Sept. 30, 1971	
15. Supplementary Notes Prepared in cooperation with the State of Ohio and with other agencies.			
16. Abstracts Water resources data for the 1971 water year for Ohio consist of stage, discharge of streams, lakes, and reservoirs. This report contains discharge records for 182 gaging stations; stage and contents for 28 lakes and reservoirs. Also included are 74 low-flow and 70 crest-stage partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Ohio.			
17. Key Words and Document Analysis. 17a. Descriptors *Ohio, *Hydrologic data, *Surface water, Flow rate, Gaging stations, Lakes, Reservoirs. 17b. Identifiers/Open-Ended Terms 17c. COSATI Field/Group			
18. Availability Statement No restriction on distribution. This report may be purchased from: National Technical Information Service Springfield, VA 22161		19. Security Class (This Report) UNCLASSIFIED 20. Security Class (This Page) UNCLASSIFIED	21. No. of Pages 236 22. Price PC A11/A01

1971

**Water Resources Data
for
Ohio
Water Year 1971**

Part 1. Surface Water Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-71-1**

Prepared in cooperation with the State of Ohio
and with other agencies

Prepared in cooperation with

Ohio Department of Highways
Ohio Department of Natural Resources, Division of Water
Miami Conservancy District
City of Columbus, Department of Public Service
Corps of Engineers, U. S. Army

Water resources records, 1971, for Ohio are in the following reports of the U. S. Geological Survey:

1. Water Resources Data for Ohio
Part 1: Surface Water Records
2. Water Resources Data for Ohio
Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
975 W. Third Avenue
Columbus, Ohio 43212

1972

CONTENTS

	Page
List of gaging stations, in downstream order, for which records are published.....	IV
Introduction.....	1
Cooperation.....	1
Definition of terms.....	2
Special networks and programs.....	3
Downstream order and station numbers.....	4
Explanation of data.....	4
Accuracy of field data and computed results.....	8
Publications.....	9
Other data available.....	10
Hydrologic conditions.....	10
Records of discharge collected by agencies other than the Geological Survey.....	11
Selected references.....	11
Surface-water records.....	14
Discharge at partial-record stations and miscellaneous sites.....	208
Low-flow partial-record stations.....	208
Crest-stage partial-record stations.....	213
Discharge measurements at miscellaneous sites.....	217
Index.....	219

ILLUSTRATIONS

Figure 1. Map of Ohio showing location of gaging stations.....	Inside back cover
2. Runoff during 1971 water year compared with median runoff for period 1931-60 for three representative gaging stations.....	12
3. Schematic diagram showing diversions and storage in the Beaver River basin of Ohio....	13
4. Schematic diagram showing diversions and storage in the Muskingum River basin of Ohio.	36

IV

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHEDOHIO RIVER BASIN

Page

Ohio River:

BEAVER RIVER BASIN

Mahoning River (head of Beaver River) at Alliance.....	14
Mill Creek near Berlin Center.....	15
Mahoning River below Berlin Dam, near Berlin Center.....	16
Mahoning River at Pricetown.....	17
Kale Creek near Pricetown.....	18
West Branch Mahoning River near Ravenna.....	19
West Branch Mahoning River below Michael J. Kirwan Dam, at Wayland.....	20
West Branch Mahoning River near Newton Falls.....	21
Eagle Creek at Phalanx Station.....	22
Mahoning River at Leavittsburg.....	23
Mosquito Creek below Mosquito Creek Dam, near Cortland	24
Mahoning River at Youngstown.....	25
Mill Creek at Youngstown.....	26
Mahoning River at Lowellville.....	27

Shenango River:

Pymatuning Creek at Kinsman.....	28
Reservoirs in Beaver River basin.....	29

LITTLE BEAVER CREEK BASIN

Little Beaver Creek near East Liverpool.....	31
--	----

YELLOW CREEK BASIN

Yellow Creek near Hammondsville.....	32
--------------------------------------	----

SHORT CREEK BASIN

Short Creek near Dillonvale.....	33
----------------------------------	----

CAPTINA CREEK BASIN

Captina Creek at Armstrongs Mills.....	34
--	----

LITTLE MUSKINGUM RIVER BASIN

Little Muskingum River at Bloomfield.....	35
---	----

MUSKINGUM RIVER BASIN

Tuscarawas River (head of Muskingum River) at Clinton...	37
--	----

Chippewa Creek at Easton.....	38
-------------------------------	----

Tuscarawas River at Massillon.....	39
------------------------------------	----

Sandy Creek at Waynesburg.....	40
--------------------------------	----

Middle Branch Nimishillen Creek at Canton.....	41
--	----

Nimishillen Creek at North Industry.....	42
--	----

Conotton Creek:

McGuire Creek below Leesville Dam, near Leesville...	43
--	----

Indian Fork below Atwood Dam, near New Cumberland...	44
--	----

Tuscarawas River below Dover Dam, near Dover.....	45
---	----

Sugar Creek above Beach City Dam, at Beach City.....	46
--	----

Sugar Creek below Beach City Dam, near Beach City.....	47
--	----

Sugar Creek at Strasburg.....	48
-------------------------------	----

Beaver Dam Creek:

Home Creek near New Philadelphia.....	49
---------------------------------------	----

Stillwater Creek at Piedmont.....	50
-----------------------------------	----

Stillwater Creek at Tippecanoe.....	51
-------------------------------------	----

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

V

OHIO RIVER BASIN--Continued	
MUSKINGUM RIVER BASIN--Continued	Page
Tuscarawas River--Continued	
Stillwater Creek at Uhrichsville.....	52
Little Stillwater Creek below Tappan Dam, at Tappan.	53
Tuscarawas River at Newcomerstown.....	54
Black Fork (head of Walhonding River) below Charles	
Mill Dam, near Mifflin.....	55
Rocky Fork:	
Touby Run at Mansfield.....	56
Black Fork at Loudonville.....	57
Clear Fork at Butler.....	58
Clear Fork below Pleasant Hill Dam, near Perrysville	59
Mohican River (continuation of Black Fork):	
Lake Fork below Mohicanville Dam, near Mohicanville.	60
Mohican River at Greer.....	61
Kokosing River at Mount Vernon.....	62
Kokosing River at Millwood.....	63
Walhonding River (continuation of Mohican River) below	
Mohawk Dam, at Nellie.....	64
Killbuck Creek at Killbuck.....	65
Mill Creek near Coshocton.....	66
Muskingum River near Coshocton.....	67
Wills Creek:	
Seneca Fork below Senecaville Dam, near Senecaville.	68
Wills Creek at Cambridge.....	69
Salt Fork below Salt Fork Dam, near Cambridge.....	70
Wills Creek below Wills Creek Dam, at Wills Creek.....	71
Wakatomika Creek near Frazeytsburg.....	72
Muskingum River at Dresden.....	73
South Fork Licking River near Hebron.....	74
North Fork Licking River at Utica.....	75
Licking River near Newark.....	76
Licking River below Dillon Dam, near Dillon Falls.....	77
Muskingum River at McConnelville.....	78
Reservoirs in Muskingum River basin.....	79
HOCKING RIVER BASIN	
Hocking River:	
Hunters Run at Lancaster.....	84
Hocking River at Lancaster.....	85
Clear Creek near Rockbridge.....	86
Hocking River at Enterprise.....	87
Sunday Creek:	
Burr Oak Reservoir at Burr Oak.....	88
Sunday Creek at Glouster.....	89
Hocking River at Athens.....	90
SHADE RIVER BASIN	
Shade River near Chester.....	91

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

<u>OHIO RIVER BASIN</u> ---Continued	Page
RACCOON CREEK BASIN	
Raccoon Creek:	
Sandy Run above Big Four Hollow Creek, near Lake Hope.	92
Big Four Hollow Creek near Lake Hope.....	93
Sandy Run near Lake Hope.....	94
Raccoon Creek at Adamsville.....	95
SCIOTO RIVER BASIN	
Scioto River:	
Little Scioto River above Marion.....	96
Scioto River near Prospect.....	97
Mill Creek near Bellepoint.....	98
Scioto River below O'Shaughnessy Dam, near Dublin.....	99
Olentangy River at Claridon.....	100
Whetstone Creek near Ashley.....	101
Olentangy River near Delaware.....	102
Olentangy River near Worthington.....	103
Scioto River at Columbus.....	104
Big Walnut Creek at Central College.....	105
Alum Creek at Africa.....	106
Alum Creek at Columbus.....	107
Big Walnut Creek at Rees.....	108
Big Darby Creek at Darbyville.....	109
Deer Creek at Mount Sterling.....	110
Deer Creek near Pancoastburg.....	111
Deer Creek at Williamsport.....	112
Scioto River at Chillicothe.....	113
Paint Creek near Greenfield.....	114
Paint Creek below Paint Creek Dam, near Bainbridge....	115
Rocky Fork near Barretts Mills.....	116
Paint Creek near Bourneville.....	117
Scioto River at Higby.....	118
Salt Creek:	
Pike Run:	
Tar Hollow Creek at Tar Hollow State Park.....	119
Reservoirs in Scioto River basin.....	120
UPPER TWIN CREEK BASIN	
Upper Twin Creek at McGaw.....	122
OHIO BRUSH CREEK BASIN	
Ohio Brush Creek near West Union.....	123
WHITEOAK CREEK BASIN	
Whiteoak Creek near Georgetown.....	124
LITTLE MIAMI RIVER BASIN	
Little Miami River near Oldtown.....	125
Massies Creek at Wilberforce.....	126
Little Miami River near Spring Valley.....	127
Caesar Creek near Xenia.....	128
Anderson Fork near New Burlington.....	129
Caesar Creek at Harveysburg.....	130

GAGING STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

VII

<u>OHIO RIVER BASIN--Continued</u>	Page
LITTLE MIAMI RIVER BASIN--Continued	
Little Miami River--Continued	
Caesar Creek near Wellman.....	131
Todd Fork near Roachester.....	132
Little Miami River at Milford.....	133
East Fork Little Miami River near Marathon.....	134
East Fork Little Miami River at Williamsburg.....	135
East Fork Little Miami River near Batavia.....	136
Shayler Run near Perintown.....	137
East Fork Little Miami River at Perintown.....	138
Little Miami River at Plainville.....	139
MILL CREEK BASIN	
Mill Creek at Reading.....	140
West Fork Mill Creek Reservoir near Greenhills.....	141
West Fork Mill Creek at Woodlawn.....	142
Mill Creek at Carthage.....	143
GREAT MIAMI RIVER BASIN	
Great Miami River:	
Bokengehalas Creek near De Graff.....	144
Stony Creek near De Graff.....	145
Great Miami River at Sidney.....	146
Loramie Creek near Newport.....	147
Loramie Creek at Lockington.....	148
Great Miami River at Troy.....	149
Great Miami River at Taylorsville.....	150
Stillwater River:	
Greenville Creek near Bradford.....	151
Stillwater River at Pleasant Hill.....	152
Stillwater River at Englewood.....	153
Mad River at Zanesfield.....	154
Mad River near Urbana.....	155
Mad River at Tremont City.....	156
Moore Run near Eagle City.....	157
Mad River at Eagle City.....	158
Mad River at St. Paris Pike, at Eagle City.....	159
Buck Creek near New Moorefield.....	160
East Fork Buck Creek near New Moorefield.....	161
Mad River near Springfield.....	162
Mad River near Dayton.....	163
Great Miami River at Dayton.....	164
Wolf Creek at Trotwood.....	165
Great Miami River at Miamisburg.....	166
Twin Creek near Ingomar.....	167
Twin Creek near Germantown.....	168
Four Mile Creek:	
Sevenmile Creek at Collinsville.....	169
Great Miami River at Hamilton.....	170
Whitewater River at Brookville, Indiana.....	171

<u>OHIO RIVER BASIN--Continued</u>	Page
WABASH RIVER BASIN	
Wabash River near New Corydon, Indiana.....	172
<u>ST. LAWRENCE RIVER BASIN</u>	
STREAMS TRIBUTARY TO LAKE ERIE	
St. Joseph River (head of Maumee River) near Newville, Indiana.....	173
St. Marys River at Decatur, Indiana.....	174
Maumee River (continuation of St. Joseph River) at New Haven, Indiana.....	175
Maumee River at Antwerp.....	176
Bean Creek (head of Tiffin River) at Powers.....	177
Tiffin River (continuation of Bean Creek) at Stryker..	178
Auglaize River near Fort Jennings.....	179
Ottawa River at Allentown.....	180
Blanchard River near Findlay.....	181
Auglaize River near Defiance.....	182
Maumee River near Defiance.....	183
Maumee River at Waterville.....	184
Portage River at Woodville.....	185
Sandusky River near Bucyrus.....	186
Sandusky River near Upper Sandusky.....	187
Tymochtee Creek at Crawford.....	188
Sandusky River near Mexico.....	189
Sandusky River near Fremont.....	190
Huron River at Milan.....	191
Vermilion River near Vermilion.....	192
Black River at Elyria.....	193
Rocky River near Berea.....	194
Cuyahoga River at Hiram Rapids.....	195
Little Cuyahoga River at Mogadore.....	196
Little Cuyahoga River at Massillon Road, Akron.....	197
Springfield Lake Outlet at Akron.....	198
Cuyahoga River at Old Portage.....	199
Tinkers Creek at Bedford.....	200
Ohio Canal at Independence.....	201
Cuyahoga River at Independence.....	202
Chagrin River at Willoughby.....	203
Grand River:	
Mill Creek near Jefferson.....	204
Grand River near Madison.....	205
Ashtabula River near Ashtabula.....	206
Conneaut Creek at Conneaut.....	207

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1971 water year for Ohio, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report and their locations shown in figure 1. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. J. Molloy, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States."

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 were also published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65."

COOPERATION

The U.S. Geological Survey and organizations of the State of Ohio have had cooperative agreements for the systematic collection of surface-water records since 1898. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Ohio Department of Natural Resources, F. E. Morr, director, succeeded by William B. Nye; and C. V. Youngquist, chief, Division of Water, succeeded by Roy Winkle.

Ohio Department of Highways, P. E. Masheter, director, succeeded by J. Phillip Richley.

Miami Conservancy District, L. Bennett Coy, general manager and secretary.

City of Columbus, Department of Public Service, W. J. Cremean, director.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 131 gaging stations published in this report, and by the Environmental Protection Agency, in collecting records for one gaging station published in this report. Assistance was also furnished by National Weather Service, NOAA, U.S. Department of Commerce.

The City of Canton furnished financial assistance in the collection of records for one gaging station published in this report.

DEFINITION OF TERMS

Definition of terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

CFS-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from man-made changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 03155500, includes the part number "03" and a 6-digit station number. The complete 03155500 appears just to the left of the station name. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF DATA

The base data collected at gaging stations consists of records of stage and measurements of discharge of streams or canals, and stage and contents of reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a non-recording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.)

For a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. Information required for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the monthly or yearly change in contents is computed.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements,

weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on reservoirs a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the 1971 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In reference to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" and all supplementary adjustments as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height (or elevation), the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height (or elevation) if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a non-recording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality

records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "m" that only the instantaneous minimum was revised; and "P" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The monthly summary for stream-gaging stations is given below the daily table. The line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or inches (line headed "IN."). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

For reservoir stations the monthly summary gives the elevation and contents at the end of the month and the change in contents during the month.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges for the calendar and water years; likewise, the minimums in this summary are the minimum daily discharges.

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE" certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

PUBLICATIONS

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Ohio for the period October 1960 to September 1965 are in Water-Supply Papers 1907, 1908, and 1912.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1305(3A) and 1307(4), records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1725(3A) and 1727(4). These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

OTHER DATA AVAILABLE

Data collected at partial-record stations and at miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurement at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites. Occasionally, a series of discharge measurements are made within a short time period to determine the low-flow characteristics of an area. Such measurements are given in special tables following the tables of partial-record stations and miscellaneous sites.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in Ohio through 1967 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year. Ten of the longer records have been analyzed to give the lowest daily discharge not exceeded during selected numbers of consecutive days (deficiency tables). Discharge records for 50 stations have also been analyzed to provide the data for plotting flow-volume curves.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

HYDROLOGIC CONDITIONS

Streamflow was excessive in the eastern half of the State during October, November, and December. Runoff at the index station on Little Beaver Creek near East Liverpool was over 6 times normal for November. A combination of frozen ground and snowmelt from warm rains in late February resulted in well above normal runoff at all index stations and minor flooding occurred in the lower reaches of the Hocking, Scioto, Great Miami, and Little Miami River basins. In April, runoff was the lowest recorded in at least 25 years at all index stations and averaged about 30 percent of normal. Runoff for the remainder of the year was near normal.

Figure 2, on page 12, for which three long-term representative gaging stations were used, shows a comparison of the monthly and yearly mean discharges during the 1971 water year with the monthly and yearly median discharges for the period 1931-60.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

Records of discharge not published by the Geological Survey were collected in Ohio at 21 sites during the water year 1971 by the following agencies: Records at 17 sites were collected by the National Weather Service; at 3 sites by the Miami Conservancy District; and by the Corps of Engineers, U.S. Army, at 1 site. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Washington, D. C., 20242, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

SELECTED REFERENCES

- Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.
- Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

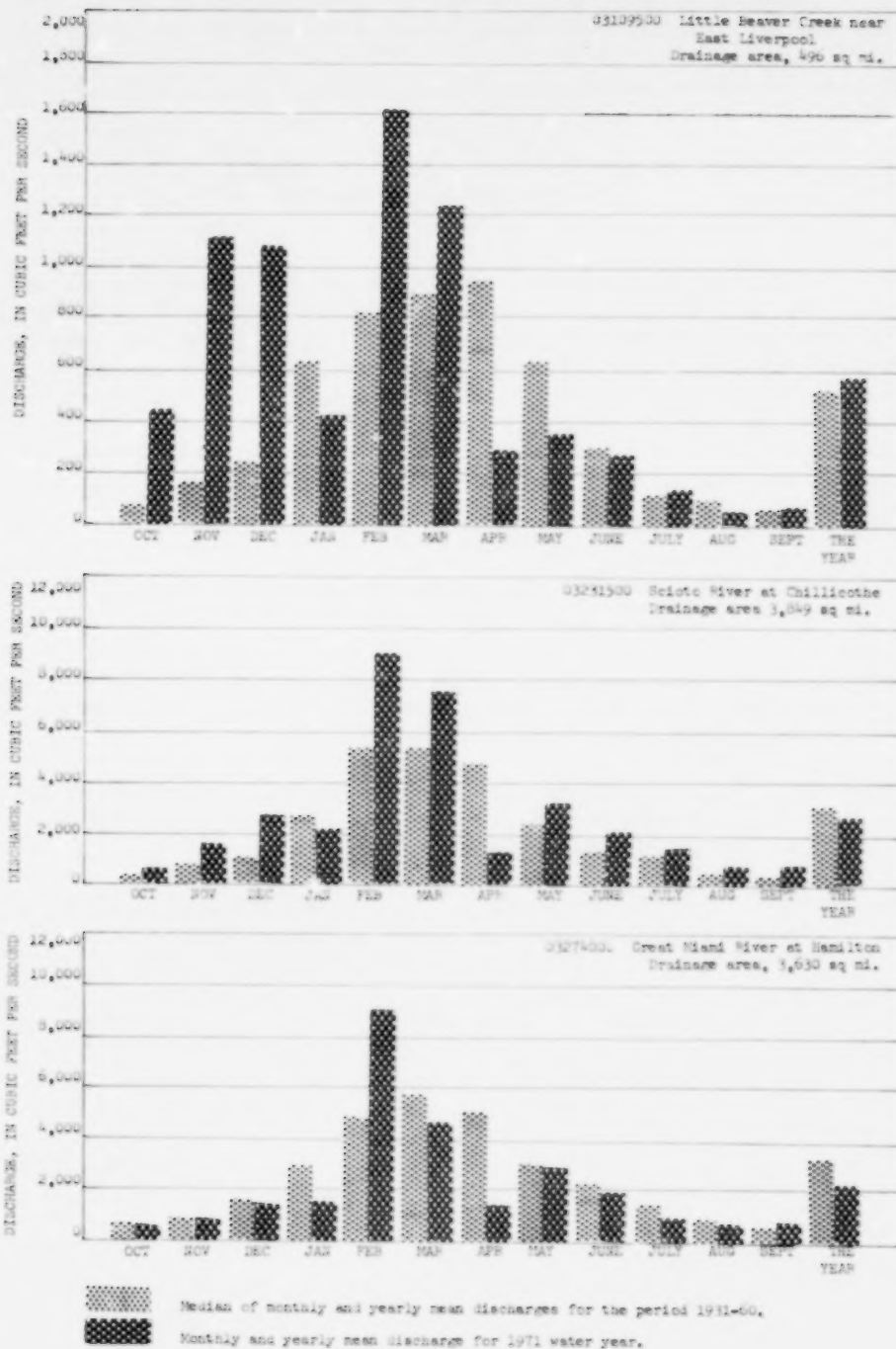


FIGURE 7.--RUNOFF DURING 1971 WATER YEAR COMPARED WITH MEDIAN RUNOFF FOR THE PERIOD 1931-60 FOR THREE REPRESENTATIVE GAGING STATIONS.

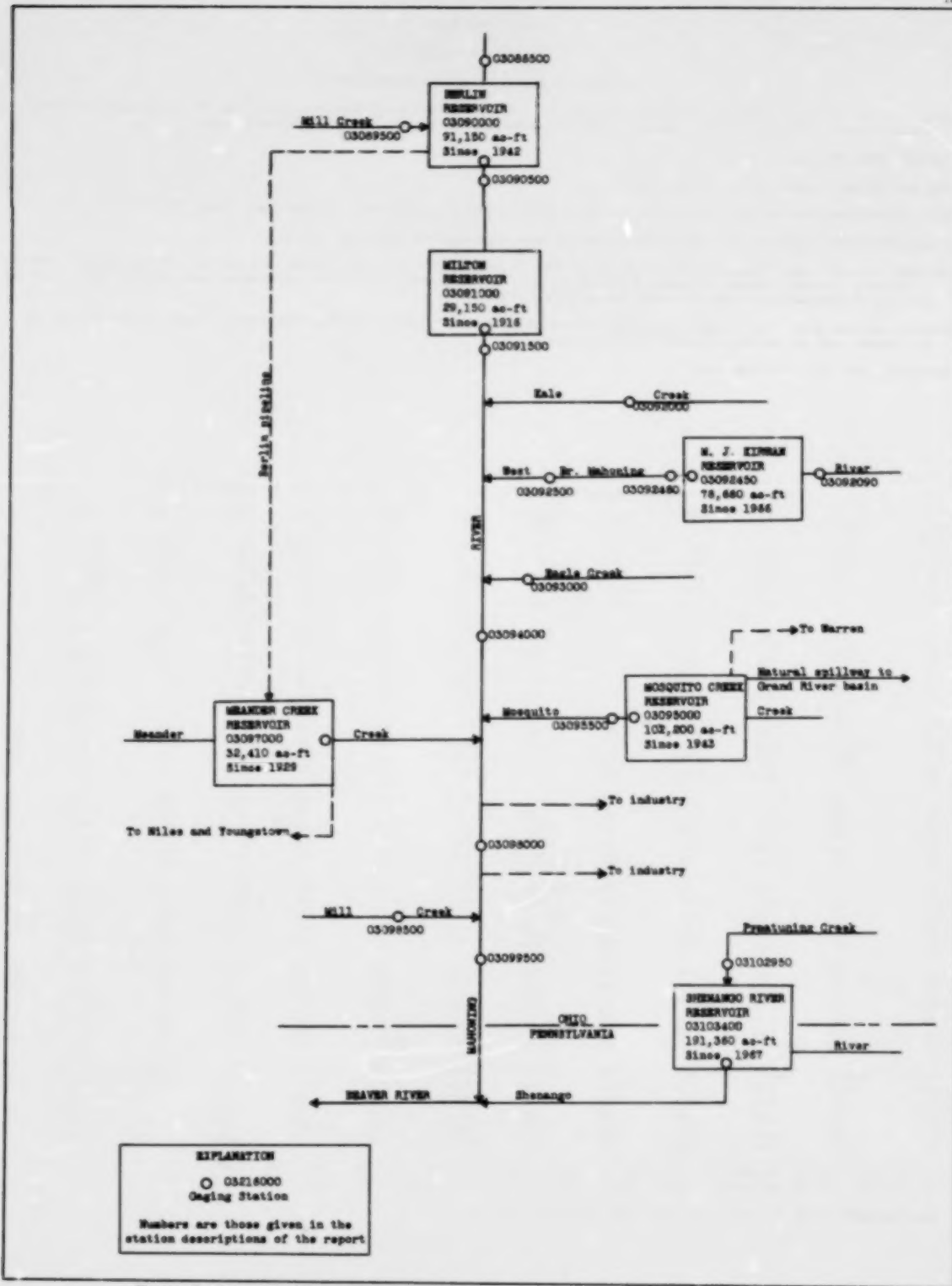


Figure 3.--Schematic diagram showing diversions and storage in the Beaver River basin in Ohio.

SURFACE WATER RECORDS

OHIO RIVER BASIN

BEAVER RIVER BASIN

03086500 Mahoning River at Alliance, Ohio

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec.24, T.19 N., R.6 W., Stark County, on right bank 15 ft upstream from Webb Avenue Bridge in Alliance, 0.2 mile upstream from waterworks dam, and 4 miles upstream from Beech Creek.

DRAINAGE AREA.--89.2 sq mi.

PERIOD OF RECORD.--August 1941 to current year.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 1,037.3 ft above mean sea level, determined as of 1917.

AVERAGE DISCHARGE.--30 years, 79.3 cfs (12.08 inches per year) unadjusted for diversion 1941-55.

EXTREMES.--Current year: Maximum discharge, 2,420 cfs Feb. 23 (gage height, 5.06 ft); minimum, 3.6 cfs Sept. 8 (gage height, 1.50 ft).
Period of record: Maximum discharge, 9,740 cfs Jan. 21, 1959 (gage height, 9.11 ft), from rating curve extended above 3,300 cfs on basis of computation of peak flow over dam; no flow at times.

REMARKS.--Records good. Flow slightly regulated by Westville Reservoir 9.3 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	418	220	43	26	183	57	20	11	7.2	11	6.1
2	21	210	126	40	22	130	68	20	12	6.1	11	6.1
3	35	309	114	37	20	100	54	20	22	6.1	11	6.1
4	24	248	435	162	20	82	42	20	18	6.1	11	6.1
5	17	137	401	334	130	68	37	20	18	6.1	9.7	4.3
6	15	100	162	115	600	141	34	107	54	7.2	7.2	6.1
7	13	75	103	69	267	441	34	118	34	7.2	6.1	5.1
8	12	54	85	56	95	412	34	118	24	7.2	6.1	4.3
9	13	48	85	38	51	157	34	85	16	12	6.1	4.3
10	16	89	82	36	40	134	31	48	14	18	6.1	6.1
11	32	153	89	37	46	137	29	37	12	32	7.2	5.1
12	68	134	352	36	56	157	29	64	54	134	6.1	12
13	238	238	703	37	78	464	29	71	54	45	5.1	19
14	238	183	357	109	60	572	37	45	22	22	5.1	16
15	401	566	166	83	55	447	34	34	16	16	5.1	7.2
16	401	616	120	49	60	374	31	31	14	16	5.1	8.4
17	110	224	232	38	68	196	31	37	12	12	4.3	9.7
18	64	126	227	34	200	165	34	34	11	11	4.3	6.1
19	42	92	151	30	469	137	29	29	11	14	4.3	14
20	42	103	118	30	1,310	196	26	24	11	24	6.1	16
21	45	205	91	28	1,090	243	24	20	34	16	5.1	16
22	78	134	115	30	844	220	22	12	34	12	7.2	16
23	64	89	201	31	1,900	153	22	11	14	12	7.2	16
24	45	61	146	30	616	122	20	11	11	20	5.1	16
25	39	48	90	34	298	107	20	16	9.7	16	5.1	18
26	34	42	70	71	368	100	18	14	8.4	12	5.1	22
27	29	51	62	38	418	92	18	12	8.4	12	7.2	22
28	29	75	55	34	352	85	20	12	9.7	11	7.2	22
29	31	130	52	32	-----	82	20	12	9.7	6.7	6.1	24
30	100	412	48	30	-----	71	29	11	8.4	12	6.1	22
31	325	-----	45	28	-----	61	-----	11	-----	12	5.1	-----
TOTAL	2,641	5,370	5,303	1,799	9,587	6,009	938	1,128	587.3	603.9	204.5	378.1
MEAN	85.2	179	171	58.0	342	194	31.3	36.4	19.6	19.5	6.60	12.6
MAX	401	616	703	334	1,900	572	68	118	54	134	11	39
MIN	12	42	45	28	20	61	18	11	8.4	6.1	4.3	4.3
CFSM	.96	2.01	1.92	.65	3.83	2.17	.35	.41	.22	.22	.07	.14
IN.	1.10	2.24	2.21	.75	4.00	2.51	.39	.47	.24	.25	.09	.16

WTH YR 1970 TOTAL 41,380 MEAN 113 MAX 1,050 MIN 11 CFSM 1.27 IN 17.26
WTH YR 1971 TOTAL 34,548.8 MEAN 94.7 MAX 1,900 MIN 4.3 CFSM 1.06 IN 14.41

PEAK DISCHARGE (BASE, 900 CFS).--Feb. 23 (0400) 2,420 cfs (5.06 ft).

BEAVER RIVER BASIN

03089500 Mill Creek near Berlin Center, Ohio

LOCATION.—Lat 41°00'01", long 80°58'07", in T.1N., R.5W., Mahoning County, on left bank at downstream side of county road bridge, 150 ft upstream from unnamed tributary, 1 mile upstream from flow line of Berlin Reservoir, 1.2 miles upstream from Turkeybroth Creek, and 2 miles southwest of Berlin Center. Records include flow of unnamed tributary.

DRAINAGE AREA.—19.1 sq mi, including that of unnamed tributary 150 ft below gage.

PERIOD OF RECORD.—September 1941 to September 1971 (discontinued as continuous-record station, converted to a crest-stage partial-record station).

GAGE.—Water-stage recorder. Datum of gage is 1,032.9 ft above mean sea level, adjustment of 1912. Prior to Oct. 22, 1941, non-recording gage at same site and datum. Apr. 24, 1947, to Sept. 10, 1952, water-stage recorder at site 100 ft downstream at same datum.

AVERAGE DISCHARGE.—30 years, 17.2 cfs (12.23 inches per year).

EXTREMES.—Current year: Maximum discharge, 1,320 cfs Feb. 22 (gage height, 6.24 ft); minimum, 0.16 cfs part of each day Sept. 8-13. Period of record: Maximum discharge, 1,900 cfs May 27, 1946 (gage height, 6.92 ft); no flow at times in 1953-55, 1962, 1965-67.

REMARKS.—Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	33	34	5.9	4.2	37	18	2.0	.96	.46	.49	.47
2	1.1	15	20	5.6	4.2	28	12	2.0	.89	.49	.34	.38
3	2.1	36	22	5.6	4.4	21	10	2.0	1.4	.46	.39	.47
4	1.4	27	97	.7	5.0	16	8.1	1.9	1.6	.36	.46	.47
5	1.1	16	43	65	29.0	18	7.2	1.7	5.7	.39	.49	.47
6	.83	11	21	24	17.0	22	6.5	32	3.0	.42	.42	.40
7	.72	7.8	14	10	6.0	211	6.2	22	3.8	.34	.44	.18
8	.68	5.9	12	6.1	36	150	5.5	38	1.9	.34	.29	.14
9	.71	4.9	14	5.0	22	100	5.0	20	1.4	.34	.27	.14
10	.74	5.2	13	4.8	14	75	4.4	11	1.1	.32	.25	.18
11	1.4	17	20	4.8	10	73	3.8	7.5	.82	3.4	.29	.18
12	2.7	24	194	5.0	11	90	3.6	24	.99	3.4	.36	.18
13	15	42	137	5.0	12	232	3.6	21	1.5	1.0	.36	.18
14	11	30	46	25	12	150	7.7	12	1.2	.66	.29	2.0
15	16	209	25	14	11	86	5.7	7.7	.96	.52	.27	.88
16	12	81	18	10	13	48	4.4	6.2	.89	.52	.25	.53
17	5.5	29	49	7.5	15	27	4.8	13	.75	.57	.23	.49
18	3.5	18	39	6.1	40	22	7.0	7.2	.70	.49	.23	.49
19	2.7	13	26	5.6	90	22	4.6	4.4	.66	.46	.21	.57
20	2.1	17	20	5.0	450	30	3.6	2.9	.61	.61	.20	.96
21	2.4	34	14	4.6	419	30	3.2	2.4	41	.57	.25	.70
22	5.1	19	23	4.5	653	39	3.0	1.9	11	.46	.32	.57
23	4.4	12	38	4.9	437	20	2.7	1.6	3.2	.52	.36	.49
24	3.3	7.1	22	4.6	86	22	2.9	1.5	1.6	1.3	.32	.46
25	2.6	5.8	14	5.5	64	29	2.3	1.8	1.0	.82	.29	.42
26	2.3	4.7	11	9.0	98	26	2.0	1.9	.96	.61	.32	.46
27	2.0	6.7	8.4	7.5	134	22	1.9	1.7	.89	.52	.46	.61
28	1.8	9.9	8.2	6.5	61	14	2.2	1.6	.75	.46	.42	.61
29	1.6	54	6.9	5.5	-----	16	2.0	1.5	.61	.39	.39	.61
30	6.9	106	6.6	5.0	-----	13	2.0	1.2	.42	.46	.34	.57
31	39	-----	6.4	4.5	-----	11	-----	1.0	-----	.57	.29	-----
TOTAL	153.88	905.0	1,022.5	339.3	3,226.7	1,706	147.8	256.6	92.23	22.63	10.24	14.65
MEAN	4.96	30.2	33.0	10.9	115	55.0	4.93	8.28	3.07	.73	.33	.49
MAX	39	209	194	65	653	232	12	38	41	3.8	.49	2.0
MIN	.68	4.7	6.4	4.5	4.2	11	1.9	1.0	.42	.32	.20	.18
CFSM	.26	1.58	1.73	.57	6.02	2.88	.26	.43	.16	.04	.02	.03
IN.	.30	1.76	1.99	.66	6.28	3.32	.29	.50	.18	.04	.02	.03
CAL YR 1970	TOTAL 7,950.14	MEAN 21.8	MAX 637	MIN .30	CFSM 1.14	IN 15.48						
WTP YR 1971	TOTAL 7,897.53	MEAN 21.6	MAX 653	MIN .18	CFSM 1.13	IN 15.38						

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	1700	5.31	774	2-22	1500	6.24	1,320
2-20	1800	5.91	1,100				

BEAVER RIVER BASIN

03090500 Mahoning River below Berlin Dam, near Berlin Center, Ohio

LOCATION.--Lat 41°02'54", long 81°00'05", in T.1 N., R.6 W., Mahoning County, on left bank 600 ft downstream from Berlin Dam and 3.2 miles northwest of Berlin Center.

DRAINAGE AREA.--248 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1942, published as "near Berlin Center".

GAGE.--Water-stage recorder and concrete control. Datum of gage is 956.00 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1942, at site 1.8 miles upstream at datum 966.15 above mean sea level, adjustment of 1912 (levels by Mahoning Valley Sanitary District). Oct. 1, 1942, to May 11, 1949, at site 200 ft downstream from present site at datum 8.00 ft lower than present datum.

AVERAGE DISCHARGE.--41 years, 218 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 3,290 cfs Mar. 1 (gage height, 5.34 ft); no flow Oct. 21, May 25.

Period of record: Maximum discharge, 8,630 cfs Jan. 25, 1937 (gage height, 10.97 ft, site and datum then in use); no flow at times during 1948-49, 1967, 1970, 1971.

REMARKS.--Records good. Flow regulated since 1942 by Berlin Reservoir (see station 03090000). Small diversion since 1958 from Berlin Reservoir to Meander Creek Reservoir (see station 03097000) by the Berlin Pipeline. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Seven discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 743: 1932. WSP 853: 1936. WSP 873: 1932-34, 1935(M), 1936-38. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	26	280	502	91	2,300	448	121	187	91	203	203
2	113	25	280	484	91	3,150	448	120	187	179	203	203
3	113	26	280	460	91	2,930	444	120	139	179	203	203
4	113	26	285	364	89	2,590	442	120	87	179	203	203
5	113	26	352	275	91	2,530	439	120	68	179	203	203
6	113	26	466	285	89	1,960	435	74	39	179	203	203
7	113	26	514	285	91	745	432	23	30	179	201	203
8	113	26	508	280	94	788	427	24	26	179	201	182
9	113	26	508	275	94	674	424	23	20	179	199	159
10	89	26	514	270	94	48	424	23	20	179	199	159
11	46	26	514	270	91	48	420	23	20	163	199	159
12	27	26	514	275	91	48	414	23	20	117	199	159
13	27	26	520	275	94	62	409	23	20	87	199	156
14	27	26	662	270	94	77	408	23	20	142	200	140
15	27	28	798	162	91	79	403	23	20	228	203	121
16	27	26	762	54	91	81	397	23	20	215	203	120
17	27	151	774	54	91	82	391	23	20	215	203	120
18	27	280	766	55	94	82	385	23	20	215	203	120
19	22	280	750	55	97	262	379	23	20	213	203	120
20	7.9	280	742	54	100	460	373	24	20	212	203	119
21	0	280	726	54	94	460	259	24	22	211	203	119
22	5.7	280	702	53	100	461	127	24	20	211	203	110
23	24	280	694	53	319	466	127	24	20	173	203	100
24	24	280	686	53	990	391	127	0	20	131	203	97
25	24	280	670	52	1,190	310	127	0	20	131	203	97
26	24	280	646	70	1,190	310	127	3.5	20	155	203	97
27	24	280	622	91	1,190	310	125	102	20	195	203	97
28	25	280	598	91	1,190	307	123	187	20	205	203	94
29	25	280	574	89	-----	378	123	187	20	203	203	94
30	24	280	550	91	-----	454	123	187	20	203	203	94
31	26	-----	526	91	-----	451	-----	187	-----	203	203	-----
TOTAL	1,600.6	4,208	17,803	5,792	8,112	23,294	9,730	1,940.5	1,205	5,530	6,266	4,256
MEAN	51.6	140	574	187	290	751	324	62.6	40.2	178	202	142
MAX	117	280	798	502	1,190	3,150	448	187	187	228	203	203
MIN	0	25	280	52	89	48	123	0	20	87	199	94
(+)	0	0	0	0	0	0	0	0	0	21.6	24.3	21.1

CAL YR 1970 TOTAL 101,965.6 MEAN 279 MAX 1,190 MIN 0 (+) 4.14

WTR YR 1971 TOTAL 89,737.1 MEAN 246 MAX 3,150 MIN 0 (+) 5.64

+ Diversion in cubic feet per second; furnished by Mahoning Valley Sanitary District.

BEAVER RIVER BASIN

17

03091500 Mahoning River at Pricetown, Ohio

LOCATION.--Lat 41°07'53", long 80°58'17", in T.2 N., R.5 W., Mahoning County, on left bank 0.3 mile downstream from Milton Dam, 0.5 mile southwest of Pricetown, and 3 miles upstream from Kale Creek.

DRAINAGE AREA.--273 sq mi.

PERIOD OF RECORD.-- July 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 905.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 239 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 2,770 cfs Mar. 5 (gage height, 8.12 ft); minimum daily, 24 cfs June 3.

Period of record: Maximum discharge, 6,770 cfs Jan. 25, 1937 (gage height, 15.01 ft), from rating curve extended above 4,200 cfs on basis of velocity-area studies; minimum daily, 0.4 cfs Nov. 9, 1941, Feb. 19, 20, Oct. 11, 1945.

REMARKS.--Records good. Flow regulated by Berlin Reservoir beginning 1942 and Milton Reservoir (see stations 03090000 and 03091000). Diversion above station from Berlin Reservoir for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Twenty-two discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 728: 1930(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	177	239	448	153	1,050	111	117	91	107	204	202
2	119	174	394	451	153	1,100	117	117	56	158	204	202
3	104	177	493	458	140	1,130	95	117	24	158	204	204
4	104	174	490	337	131	1,660	83	117	27	158	207	202
5	104	174	490	236	138	2,650	83	117	34	160	207	204
6	104	172	486	239	136	2,580	93	119	37	160	207	204
7	104	172	486	241	133	1,340	100	105	34	160	207	204
8	105	172	486	241	133	888	100	93	35	160	207	179
9	105	169	486	247	133	1,190	102	85	34	163	209	167
10	105	169	486	249	133	1,070	102	80	34	160	212	167
11	105	169	490	249	133	1,050	102	75	34	163	212	169
12	160	169	493	252	133	1,020	104	77	35	160	209	172
13	194	169	500	255	133	1,000	117	69	35	142	209	174
14	192	167	500	255	133	978	125	59	35	167	209	169
15	192	172	680	258	133	956	125	54	35	197	212	153
16	189	167	800	261	131	924	125	55	34	199	212	136
17	189	370	800	258	133	900	125	56	35	199	209	115
18	187	497	800	261	133	872	127	56	35	199	209	111
19	187	490	800	258	138	840	121	58	35	202	209	107
20	187	334	800	199	140	824	117	59	35	202	207	102
21	187	233	796	160	140	820	119	60	37	202	207	93
22	184	233	792	160	142	563	119	62	35	202	204	85
23	184	233	792	158	144	388	119	63	35	204	202	85
24	182	233	788	158	500	391	117	63	35	204	202	85
25	182	233	784	158	1,020	388	117	80	35	204	202	85
26	182	233	780	158	1,030	385	119	98	35	204	202	85
27	179	233	776	156	1,030	379	119	96	36	204	199	86
28	179	236	768	156	1,040	376	119	96	36	204	202	85
29	179	236	748	156	-----	275	117	95	36	204	199	85
30	179	239	740	153	-----	142	117	93	37	204	202	71
31	179	-----	563	153	-----	105	-----	93	-----	204	202	-----
TOTAL	4,841	6,776	19,526	7,379	7,769	28,234	3,356	2,584	1,111	5,614	6,388	4,188
MEAN	156	226	630	238	277	911	112	83.4	37.0	181	206	140
MAX	194	497	800	458	1,040	2,650	127	119	91	204	212	204
MIN	104	167	239	153	131	105	83	54	24	107	199	71
CAL YR 1970	TOTAL	119,462	MEAN	327	MAX	1,340	MIN	64				
WTR YR 1971	TOTAL	97,766	MEAN	268	MAX	2,650	MIN	24				

BEAVER RIVER BASIN

03092000 Kale Creek near Pricetown, Ohio

LOCATION.--Lat 41°06'23", long 80°59'43", in T.3 N., R.5 W., Trumbull County, on right bank at downstream side of road bridge, 0.4 mile north of Mahoning-Trumbull County line, 1.5 miles northwest of Pricetown, 2.2 miles upstream from mouth, and 3.5 miles south of Newton Falls.

DRAINAGE AREA.--21.9 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 914.70 ft above mean sea level, adjustment of 1912. Prior to June 27, 1941, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 20.5 cfs (12.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 703 cfs Feb. 23 (gage height, 4.84 ft); minimum, 0.25 cfs Oct. 11.

Period of record: Maximum discharge, 3,890 cfs Jan. 21, 1959 (gage height, 8.52 ft); no flow at times in 1952-55, 1962-66.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1942. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	21	46	3.7	1.9	35	6.6	1.4	.96	.81	.59	.41
2	.38	8.8	24	3.5	1.8	22	7.5	1.8	.88	.75	.56	.38
3	.38	22	17	3.2	1.6	14	8.8	1.8	2.6	.66	.53	.35
4	.35	28	103	58	1.8	9.2	6.2	1.5	4.9	.62	.53	.35
5	.35	9.5	53	145	150	8.8	4.9	1.4	2.8	.59	.53	.41
6	.33	5.4	25	36	250	20	3.7	51	30	.59	.50	.44
7	.33	3.9	9.9	11	70	270	3.3	65	7.8	.59	.47	.44
8	.30	3.2	12	5.2	35	84	2.8	53	16	.59	.44	.39
9	.30	2.5	14	2.6	24	37	2.6	40	7.8	.62	.41	.33
10	.30	2.5	16	2.2	18	30	2.3	14	2.8	.66	.38	.30
11	.30	4.7	36	2.3	15	26	2.0	7.8	1.6	.96	.38	.30
12	.33	7.5	240	2.3	13	29	1.9	28	1.2	1.4	.38	.33
13	13	68	362	2.2	17	117	2.0	46	1.2	1.0	.38	.81
14	12	35	67	6.9	26	71	4.7	16	1.0	.96	.41	5.4
15	4.7	268	32	14	33	52	6.0	8.1	.96	.75	.41	3.2
16	2.8	109	19	6.6	23	52	4.9	5.7	.96	.70	.38	1.6
17	2.2	28	48	4.7	20	33	3.9	4.9	.88	.66	.33	1.0
18	1.8	14	49	3.2	60	24	5.7	4.2	.75	.56	.30	.70
19	1.8	8.5	28	2.5	292	28	5.2	3.5	.66	.59	.30	.62
20	1.6	7.5	21	2.0	592	32	3.7	2.8	.66	1.5	.35	.70
21	2.0	20	14	1.9	289	88	2.8	2.3	46	1.5	.35	1.1
22	2.6	16	15	1.9	225	44	2.5	1.9	32	1.4	.44	1.0
23	3.0	7.8	38	2.0	511	28	2.0	1.6	5.2	.88	.53	.88
24	3.0	4.2	25	1.9	97	24	1.8	1.5	2.2	.88	.44	.70
25	2.6	3.7	14	2.3	56	22	1.5	3.2	1.4	.88	.44	.66
26	2.8	3.5	7.5	3.5	114	20	1.5	3.7	1.0	.75	.41	.70
27	2.8	3.7	6.0	3.1	191	20	1.4	3.3	.88	.62	.41	1.1
28	3.0	5.7	5.2	2.6	76	16	1.4	2.3	.75	.53	.44	1.5
29	3.7	30	4.9	2.4	-----	14	1.4	1.8	.96	.59	.44	1.3
30	7.2	144	4.4	2.2	-----	9.9	1.4	1.4	.96	.59	.44	3.2
31	18	-----	3.9	2.1	-----	7.5	-----	1.2	-----	.59	.44	-----
TOTAL	94.66	895.6	1,359.8	343.0	3,204.1	1,287.4	106.4	382.1	177.76	24.77	13.34	30.60
MEAN	3.05	29.9	43.9	11.1	114	41.5	3.55	12.3	5.93	.80	.43	1.02
MAX	18	268	362	145	552	270	8.8	65	46	1.5	.59	5.4
MIN	.30	2.5	3.9	1.9	1.6	7.5	1.4	1.2	.66	.53	.30	.30
CFSM	.14	1.37	2.00	.51	5.21	1.90	.16	.56	.27	.04	.02	.05
IN.	.16	1.52	2.31	.58	5.44	2.19	.18	.65	.30	.04	.02	.05

CAL YR 1970 TOTAL 10,218.92 MEAN 28.0 MAX 942 MIN .23 CFSM 1.28 IN 17.36
WTR YR 1971 TOTAL 7,919.53 MEAN 21.7 MAX 592 MIN .30 CFSM .99 IN 13.45

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-13	0300	4.67	628	2-23	0230	4.84	703
2-20	1030	4.75	662				

BEAVER RIVER BASIN

19

03092090 West Branch Mahoning River near Ravenna, Ohio

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, on left bank at downstream side of bridge on Newton Falls Road, 2.5 miles east of Ravenna.

DRAINAGE AREA.--21.8 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,011.8 ft above mean sea level (Portage County bench mark).

AVERAGE DISCHARGE.--6 years, 23.0 cfs (14.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 558 cfs Feb. 19 (gage height, 5.75 ft); minimum, 0.60 cfs Aug. 20.
Period of record: Maximum discharge, 1,460 cfs Dec. 28, 1968 (gage height, 7.67 ft); minimum, 0.60 cfs Aug. 20, 1971.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	30	37	9.0	7.5	38	20	8.7	4.0	8.7	1.4	3.4
2	5.2	22	25	8.5	7.0	29	28	9.5	3.8	5.3	1.4	2.5
3	4.4	42	26	8.0	6.5	23	22	8.7	8.3	3.4	1.4	2.1
4	3.5	39	195	116	7.0	19	17	8.0	5.9	2.5	1.4	1.8
5	2.9	22	59	144	224	22	15	7.6	4.6	2.1	1.2	1.6
6	2.9	16	32	30	233	47	13	85	28	2.3	1.1	1.8
7	3.1	13	24	19	80	189	13	39	17	2.3	.86	1.5
8	3.3	10	21	10	35	55	11	32	58	1.9	.86	1.5
9	2.9	9.1	28	7.8	19	37	11	22	20	1.5	.86	1.4
10	4.2	12	26	7.2	15	31	11	15	4.9	1.5	1.1	1.3
11	5.2	16	34	7.5	13	28	10	12	5.9	6.2	1.5	1.3
12	7.2	15	213	7.8	13	33	9.9	62	4.6	6.8	1.1	1.3
13	184	25	182	7.5	15	110	11	37	4.3	3.1	.99	1.4
14	52	33	56	32	16	84	29	20	3.0	2.1	.99	1.4
15	51	258	33	25	16	71	19	14	3.4	1.6	.99	1.7
16	22	94	27	16	14	55	14	13	3.0	2.1	.86	8.0
17	13	35	57	14	16	36	15	16	2.5	1.4	.99	5.3
18	9.9	24	48	12	26	27	18	12	2.3	1.8	.86	3.8
19	7.5	18	32	9.1	240	33	13	4.9	2.3	2.3	.86	3.2
20	6.8	21	27	7.8	422	42	10	9.5	2.1	3.4	.99	2.7
21	8.6	28	19	7.8	176	41	9.5	7.6	34	2.7	.99	4.0
22	15	20	31	7.8	162	59	8.7	6.6	12	1.9	1.4	14
23	12	15	44	8.2	267	42	8.0	6.2	5.9	1.5	1.3	4.0
24	9.5	10	27	7.8	62	34	8.0	5.9	3.6	4.0	1.3	5.3
25	7.5	9.9	17	8.6	59	30	7.6	22	3.2	8.0	1.1	3.8
26	6.8	9.9	14	14	102	32	8.0	16	2.5	4.3	1.6	5.3
27	6.2	16	13	13	157	40	8.0	11	2.1	3.0	2.74	8.7
28	5.9	27	12	11	68	45	8.7	8.3	1.9	2.1	38	29
29	6.8	53	11	10	-----	35	8.7	6.6	36	1.8	15	19
30	39	94	10	9.0	-----	26	9.1	5.6	18	1.6	7.6	41
31	54	-----	9.5	8.0	-----	21	-----	4.6	-----	1.6	4.6	-----
TOTAL	566.0	1,076.9	1,389.5	603.4	2,498.0	1,418	394.2	541.3	313.1	94.8	368.70	353.7
MEAN	18.3	35.9	44.8	19.5	89.2	45.7	13.1	17.5	10.4	3.06	11.9	11.8
MAX	184	258	213	144	422	189	29	85	58	8.7	2.74	58
MIN	2.9	9.1	9.5	7.2	6.5	19	7.6	4.6	1.9	1.5	.86	1.3
CFSM	.84	1.65	2.06	.89	4.09	2.10	.60	.80	.48	.14	.55	.54
IN.	.97	1.84	2.37	1.03	4.26	2.42	.67	.92	.53	.16	.63	.60
CAL YR 1970 TOTAL	10,448.2			MEAN 28.6	MAX 424	MIN 1.8	CFSM 1.31	IN 17.87				
WTR YR 1971 TOTAL	9,617.60			MEAN 26.3	MAX 422	MIN .86	CFSM 1.21	IN 16.41				

PEAK DISCHARGE (BASE, 450 CFS, revised)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	2000	5.68	540	2-19	2030	5.75	558

BEAVER RIVER BASIN

03092460 West Branch Mahoning River below Michael J. Kirwan Dam, at Wayland, Ohio

LOCATION.--Lat 41°09'25", long 81°04'19", in T.3N., R.6W., Portage County, on right bank 200 feet upstream from bridge on Wayland Road, 0.4 mile below Michael J. Kirwan Dam, and 0.2 mile south of Wayland.

DRAINAGE AREA.--81.7 sq mi.

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1968 published as West Branch Mahoning River below West Branch Dam at Wayland.

GAGE.--Water-stage recorder. Datum of gage is 927.33 ft above mean sea level, levels by Corps of Engineers.

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Feb. 25 (gage height, 10.93 ft); minimum daily, 14 cfs Jan. 26, May 10, 11, 14, 26.

Period of record: Maximum discharge, 1,380 cfs Feb. 25, 1971 (gage height, 10.93 ft); minimum daily, 2.5 cfs Apr. 9, 1969.

REMARKS.--Records good. Flow completely regulated by Michael J. Kirwan Reservoir (see station 03092450). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Seventeen discharge measurements furnished by Corps of Engineers.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	74	110	204	15	454	89	21	122	160	80	74
2	111	76	139	138	15	452	89	22	122	123	80	74
3	109	61	142	137	17	451	89	22	122	123	80	74
4	108	57	159	148	18	347	65	22	156	122	80	74
5	105	73	148	144	31	286	40	22	156	122	71	74
6	103	73	146	109	20	200	40	22	172	121	77	75
7	103	73	146	83	17	101	40	15	81	121	77	76
8	97	73	146	83	16	130	40	16	35	121	77	90
9	103	72	147	81	16	210	40	15	37	121	77	119
10	110	73	146	80	16	210	40	14	37	119	76	130
11	112	73	151	80	16	206	39	14	120	101	76	130
12	66	74	168	80	16	206	40	16	194	80	76	130
13	34	76	161	79	16	155	39	15	194	79	76	140
14	30	76	210	81	16	91	40	14	194	79	75	134
15	32	88	278	50	16	51	40	41	195	79	75	131
16	47	96	279	21	16	26	31	83	195	80	75	130
17	64	199	280	19	17	25	22	65	195	79	75	129
18	64	274	278	19	21	24	21	42	195	79	75	129
19	64	271	276	18	28	24	21	61	195	80	75	129
20	65	271	275	17	31	24	21	83	195	80	76	131
21	66	271	275	18	18	26	21	83	160	78	76	131
22	67	268	276	17	24	26	21	83	122	78	76	129
23	67	269	275	17	26	24	21	83	163	78	76	129
24	67	268	273	17	491	24	21	83	194	78	76	130
25	68	265	273	17	1,120	50	21	48	194	72	76	129
26	68	263	272	14	1,040	89	21	14	194	62	74	129
27	69	262	272	16	469	89	21	68	194	62	76	131
28	52	261	271	16	459	89	21	121	194	73	76	130
29	71	267	271	16	-----	89	21	121	198	81	76	130
30	76	220	270	16	-----	89	21	121	195	80	74	130
31	76	-----	269	16	-----	89	-----	121	-----	80	74	-----
TOTAL	2,386	4,817	6,782	1,851	4,021	4,357	1,096	1,571	4,720	2,891	2,359	3,471
MEAN	77.0	161	219	59.7	144	141	36.5	50.7	157	93.5	76.1	116
MAX	112	274	280	204	1,120	454	89	121	198	160	80	140
MIN	30	57	110	14	15	24	21	14	35	62	71	74

CAL YR 1970 TOTAL 32,211.3 MEAN 88.3 MAX 533 MIN 8.9
 WTR YR 1971 TOTAL 40,322 MEAN 110 MAX 1,120 MIN 14

BEAVER RIVER BASIN

21

03092500 West Branch Mahoning River near Newton Falls, Ohio

LOCATION.--Lat 41°10'18", long 81°01'16", in T.3 N., R.6 W., Trumbull County, on right bank 250 ft downstream from bridge on Newton Falls Road, 2.5 miles southwest of Newton Falls, 6 miles upstream from mouth, and 5 miles downstream from West Branch Reservoir.

DRAINAGE AREA.--96.3 sq mi.

PERIOD OF RECORD.--June 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is 912.2 ft above mean sea level (Corps of Engineers bench mark). Prior to Aug. 30, 1929, nonrecording gage at site 75 ft upstream at same datum.

AVERAGE DISCHARGE.--45 years, 94.3 cfs.

EXTREMES.--Current year: Maximum discharge, 1,420 cfs Feb. 26 (gage height, 7.90 ft); minimum, 19 cfs Jan. 26.
Period of record: Maximum discharge, 8,340 cfs Jan. 22, 1959 (gage height, 13.60 ft); minimum, 2.1 cfs Sept. 20, 1964.

REMARKS.--Records good. Flow regulated by Michael J. Kirwan Reservoir (see station 03092450) since December 1966. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1926-30, 1933, 1934(M), 1936-38, 1939(M), 1940. WSP 1385: 1929(M), 1945. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT
1	121	86	136	217	24	461	49	25	119	176	74	74
2	121	80	148	142	24	450	46	26	119	127	74	74
3	118	95	150	140	24	444	45	26	123	127	74	74
4	119	75	230	192	26	370	84	25	134	125	74	74
5	118	80	174	200	180	265	51	25	192	123	74	74
6	118	78	156	142	130	232	51	70	272	119	77	74
7	118	77	150	110	57	238	51	49	136	119	77	74
8	113	76	148	100	39	142	49	46	63	117	75	74
9	117	75	152	96	38	206	45	36	59	115	74	74
10	121	79	150	91	36	206	49	27	54	113	75	138
11	124	80	170	91	36	202	48	24	95	11	74	142
12	94	86	279	91	36	204	48	38	192	11	74	140
13	78	119	277	91	34	217	49	39	192	74	74	154
14	52	97	208	102	34	127	54	29	192	74	74	164
15	60	232	272	87	34	102	52	32	192	74	72	144
16	57	133	267	35	35	59	48	96	192	74	72	142
17	76	176	294	34	36	46	29	43	192	74	72	140
18	75	257	264	34	68	39	30	57	192	74	72	140
19	75	248	270	32	188	41	27	65	192	81	72	140
20	74	249	265	29	287	51	27	96	191	84	74	144
21	75	256	259	27	146	54	26	95	196	74	74	148
22	76	248	270	27	150	75	25	95	138	74	74	142
23	75	243	281	25	249	51	25	93	155	74	74	140
24	75	240	265	25	342	45	25	93	191	74	72	140
25	75	236	256	25	975	54	25	84	190	77	72	140
26	75	234	252	24	1,310	100	28	27	190	80	72	140
27	74	236	250	24	598	94	25	46	191	80	74	144
28	60	239	250	24	486	94	25	123	191	65	74	148
29	73	270	249	24	-----	96	25	123	197	74	74	142
30	83	303	247	24	-----	95	25	121	192	74	74	144
31	96	-----	247	24	-----	93	-----	121	-----	79	74	-----
TOTAL	2,790	4,983	7,090	2,329	5,620	4,951	1,331	1,946	4,931	2,905	2,305	3,737
MEAN	90.0	166	226	75.1	201	160	44.4	62.8	164	93.7	74.4	125
MAX	124	303	294	217	1,310	461	96	123	272	176	74	154
MIN	52	75	130	24	24	34	25	24	54	60	72	74
CAL YR 1970	TOTAL 36,444	MEAN 99.8	MAX 464	MIN 12								
WTR YR 1971	TOTAL 44,838	MEAN 123	MAX 1,310	MIN 24								

BEAVER RIVER BASIN

03093000 Eagle Creek at Phalanx Station, Ohio

LOCATION.--Lat 41°15'40", long 80°57'16", Trumbull County, on right bank 75 ft downstream from county road bridge, 1 mile north of Phalanx Station, 2 miles downstream from Tinkers Creek, and 4 miles upstream from mouth.

DRAINAGE AREA.--97.6 sq mi.

PERIOD OF RECORD.--June 1926 to September 1934, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 887.42 ft above mean sea level, adjustment of 1912 (levels by Mahoning Valley Sanitary District). Prior to Sept. 14, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 103 cfs (14.34 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,970 cfs Feb. 20 (gage height, 11.28 ft); minimum, 5.2 cfs Aug. 19.

Period of record: Maximum discharge, 6,700 cfs Jan. 22, 1939 (gage height, 13.12 ft); minimum, 0.6 cfs Aug. 4, 1939; minimum daily, 0.9 cfs Aug. 4, 1939.

REMARKS.--Records good. Low flow slightly regulated by mill several miles above station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Five discharge measurements furnished by the Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 953: 1938-41. WSP 1385: 1927-30, 1931-32(M), 1934, 1938-41(P). WSP 1555: 1928(M), 1929. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	179	275	50	38	310	107	46	21	41	14	24
2	16	109	154	48	36	202	118	44	19	33	14	21
3	16	127	105	47	36	157	122	44	21	27	12	18
4	18	248	238	123	41	118	97	41	25	27	12	15
5	17	137	466	491	138	117	82	38	20	28	12	17
6	16	80	230	454	454	143	73	124	77	30	11	15
7	21	57	136	220	549	421	69	289	126	29	11	14
8	20	46	105	150	322	504	64	177	147	21	11	12
9	16	40	107	110	200	264	60	151	175	18	11	11
10	15	39	119	80	110	204	60	98	73	18	9.0	11
11	19	66	103	64	90	171	59	69	47	26	8.5	12
12	23	62	192	56	80	158	54	119	37	154	9.0	12
13	97	99	606	49	90	249	54	197	36	122	8.0	24
14	239	135	462	103	95	440	99	119	33	103	7.7	154
15	144	259	226	156	90	475	99	78	28	69	9.0	109
16	115	608	141	90	95	388	73	65	26	41	11	45
17	70	313	164	70	120	261	67	82	25	23	8.0	26
18	42	142	246	58	193	181	91	67	24	20	6.6	22
19	33	98	202	53	519	157	76	54	23	19	5.9	22
20	29	81	147	47	1,710	201	63	51	25	18	6.3	25
21	26	97	106	45	1,600	209	56	49	40	26	7.0	119
22	31	95	108	46	738	245	52	43	56	17	9.0	71
23	38	73	178	47	1,100	248	49	39	36	14	19	37
24	34	55	166	45	908	199	47	37	30	14	18	26
25	29	50	99	45	400	174	46	87	29	28	11	22
26	27	48	74	52	350	160	45	106	24	25	9.5	20
27	24	63	65	51	530	170	43	59	29	18	8.0	22
28	24	122	65	50	558	187	44	40	29	14	197	63
29	24	139	60	44	-----	193	49	33	65	13	73	51
30	46	245	55	42	-----	158	49	28	75	12	34	63
31	144	-----	55	40	-----	124	-----	25	-----	13	23	-----
TOTAL	1,430	3,912	5,455	3,026	11,190	7,188	2,067	2,499	1,475	1,061	677.5	1,103
MEAN	46.1	130	176	97.6	400	232	68.9	80.6	49.2	34.2	21.9	35.8
MAX	239	606	606	491	1,710	504	122	249	197	154	197	154
MIN	15	39	55	40	36	117	43	25	19	12	5.9	11
CFSM	.47	1.33	1.80	1.00	4.10	2.38	.71	.83	.50	.35	.22	.38
IN.	.55	1.49	2.08	1.15	4.27	2.74	.79	.95	.56	.40	.26	.42

CAL YR 1970 TOTAL 37,889.8 MEAN 104 MAX 1,080 MIN 7.4 CFSM 1.07 IN 14.44
 WTR YR 1971 TOTAL 41,083.5 MEAN 113 MAX 1,710 MIN 5.9 CFSM 1.16 IN 15.66

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	1630	11.28	1,970	2-23	2100	10.78	1,570

BEAVER RIVER BASIN

03094000 Mahoning River at Leavittsburg, Ohio

LOCATION.--Lat 41°14'21", long 80°52'51", in T.4 N., R.4 W., Trumbull County, on right bank at upstream side of Leavitt Road Bridge at Leavittsburg, 300 ft downstream from Duck Creek and 1.2 miles downstream from Eagle Creek.

DRAINAGE AREA.--575 sq mi.

PERIOD OF RECORD.--October 1940 to current year. Prior to June 1941 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft above mean sea level, adjustment of 1912. Prior to July 2, 1941, nonrecording gage and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft downstream at same datum.

AVERAGE DISCHARGE.--31 years, 529 cfs.

EXTREMES.--Current year: Maximum discharge, 3,770 cfs Feb. 20 (gage height, 9.73 ft); minimum, 148 cfs June 11.
Period of record: Maximum discharge, 20,300 cfs Jan. 22, 1959 (gage height, 19.37 ft); minimum, 55 cfs July 7, 1952.
Flood of Mar. 26, 1913 reached a stage of about 24 ft. Flood of Jan. 25 or 26, 1937, reached a stage of 17.8 ft.

REMARKS.--Records good except those for days of no gage-height record which are fair. Flow regulated by Berlin Reservoir (25 miles upstream), beginning in 1942, by Milton Reservoir (17 miles upstream), and by Michael J. Kirwan Reservoir (20 miles upstream) on West Branch, beginning in 1966 (see stations 03090000, 03091000 and 03092450). Diversion above station from Berlin Reservoir for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Ten discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	474	910	765	200	2,000	416	214	259	259	300	285
2	241	414	684	670	190	1,700	420	214	304	297	297	297
3	235	434	800	634	180	1,500	420	211	205	290	300	290
4	235	530	1,160	785	193	1,600	380	208	202	285	297	279
5	232	454	1,350	1,190	382	2,900	320	202	244	283	293	279
6	235	370	1,100	1,020	1,250	2,500	260	398	482	279	279	278
7	232	332	900	742	1,150	3,300	250	711	470	276	283	278
8	235	314	800	522	770	2,600	240	558	478	272	283	272
9	228	310	800	426	478	1,500	240	482	380	279	283	282
10	228	340	750	378	382	1,500	230	339	283	272	278	290
11	235	350	750	374	346	1,300	210	265	160	311	279	297
12	250	390	1,300	374	338	1,300	200	307	241	300	279	293
13	344	462	2,000	367	378	1,700	210	470	262	256	275	360
14	470	522	1,900	442	410	2,000	290	353	259	238	269	470
15	458	910	1,400	508	406	1,900	310	250	253	283	275	426
16	374	1,260	1,300	410	370	1,700	300	253	250	304	272	335
17	335	970	1,500	356	360	1,500	283	290	247	293	269	278
18	310	940	1,600	325	482	1,100	304	262	244	293	265	268
19	293	875	1,500	321	1,200	1,000	290	223	244	310	282	265
20	282	805	1,300	293	3,020	1,100	256	238	241	330	272	279
21	286	656	1,200	223	3,230	1,200	244	247	325	320	278	335
22	290	643	1,300	214	1,880	1,300	235	235	321	311	269	318
23	290	598	1,400	214	2,530	1,000	226	232	229	304	297	269
24	286	558	1,400	211	2,240	850	220	229	244	311	300	280
25	279	540	1,200	211	2,330	750	223	290	244	321	314	244
26	276	530	1,100	229	2,680	750	214	307	241	311	297	244
27	268	540	1,100	214	2,910	750	211	235	238	290	307	280
28	265	589	1,100	232	2,600	750	211	269	235	283	434	278
29	256	652	1,000	232	-----	700	217	283	253	297	394	297
30	296	1,020	1,030	226	-----	600	217	276	226	304	318	283
31	422	-----	980	217	-----	470	-----	265	-----	304	293	-----
TOTAL	8,947	17,782	36,614	13,325	32,895	44,220	8,041	9,316	8,216	9,074	9,099	8,828
MEAN	289	593	1,181	430	1,175	1,426	268	301	274	293	294	294
MAX	470	1,260	2,000	1,190	3,230	3,300	420	711	482	330	434	470
MIN	226	310	684	211	180	470	200	202	160	238	242	244

CAL YR 1970 TOTAL 222,296 MEAN 609 MAX 2,790 MIN 158
WTR YR 1971 TOTAL 206,357 MEAN 565 MAX 3,300 MIN 160

NOTE.--No gage height record Nov. 9-12, Dec. 6-31, Feb. 1, 2, Mar. 1 to Apr. 15.

BEAVER RIVER BASIN

03095500 Mosquito Creek below Mosquito Creek Dam, near Cortland, Ohio

LOCATION.--Lat 41°17'59", long 80°45'31", in T.5 N., R.3 W., Trumbull County, on right bank 100 ft downstream from Mosquito Creek Dam, 0.8 mile upstream from Confusion Run, and 2.5 miles southwest of Cortland.

DRAINAGE AREA.--97.5 sq mi.

PERIOD OF RECORD.--May 1926 to September 1929 (published as Mosquito Creek near Cortland), May 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 873.98 ft above mean sea level (Corps of Engineers bench mark). Prior to Aug. 23, 1943, nonrecording gage, and Aug. 23, 1943, to Feb. 14, 1951, water-stage recorder, at site 900 ft downstream at datum 6.63 ft lower.

AVERAGE DISCHARGE.--31 years, 86.4 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 970 cfs Mar. 4 (gage height, 4.32 ft); minimum daily, 5.7 cfs several days in May and June.

Period of record: Maximum discharge, 1,890 cfs Jan. 19, 1929 (gage height, 11.5 ft, from floodmark, site and datum then in use); no flow at times.

REMARKS.--Records good. Flow completely regulated by Mosquito Creek Reservoir beginning 1943 (see station 03095000). Diversion at reservoir outlet for municipal supply of city of Warren since May 1954; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	32	241	86	21	498	88	6.2	5.7	152	129	73
2	59	31	241	86	21	742	88	6.2	5.7	152	129	73
3	59	31	241	86	21	915	88	6.2	5.7	132	129	73
4	59	24	241	86	21	815	59	6.2	5.7	115	129	73
5	59	19	241	86	21	682	25	6.2	6.2	115	129	73
6	59	19	244	86	21	427	25	6.2	6.2	115	129	73
7	59	19	241	86	21	129	25	6.2	5.7	115	129	73
8	59	19	241	86	21	129	25	6.2	5.7	113	129	74
9	58	21	160	86	21	129	25	6.2	5.7	113	129	74
10	58	27	86	86	21	129	16	6.2	5.7	113	126	74
11	59	27	86	86	21	129	6.2	6.2	12	113	115	73
12	45	28	86	86	21	129	6.2	6.2	21	101	103	73
13	32	28	86	86	17	79	6.2	6.2	21	92	103	73
14	31	28	86	86	17	27	6.2	6.2	45	97	103	68
15	32	28	86	56	19	27	6.2	6.2	88	107	103	51
16	32	55	86	24	21	27	6.2	6.2	88	107	101	29
17	32	165	86	24	21	27	6.2	6.2	95	107	101	29
18	32	250	86	24	21	27	6.2	5.7	103	105	101	29
19	32	247	86	24	20	27	6.2	8.6	103	117	101	29
20	32	247	86	21	21	27	6.2	15	107	131	101	24
21	32	247	86	21	21	27	6.2	19	62	131	101	33
22	32	247	86	21	21	26	6.2	23	19	131	101	33
23	32	247	86	21	21	26	6.2	23	77	131	103	33
24	32	247	86	21	259	26	6.2	23	109	129	103	33
25	32	244	86	21	658	57	6.2	13	109	129	103	33
26	32	244	86	21	550	90	6.2	5.7	109	129	103	33
27	32	244	86	21	287	90	6.2	6.2	109	129	66	33
28	32	244	86	21	287	90	6.2	6.2	109	129	28	33
29	32	241	86	21	-----	90	6.2	5.7	131	129	28	32
30	32	244	86	21	-----	90	6.2	5.7	152	129	28	32
31	32	-----	86	21	-----	83	-----	5.7	-----	129	50	-----
TOTAL	1,299	3,794	3,983	1,608	2,513	5,816	588.0	270.9	1,727.0	3,737	3,133	1,544
MEAN	41.9	126	128	51.9	89.8	188	19.6	8.74	57.6	121	101	51.5
MAX	59	250	244	86	658	915	88	23	152	152	129	74
MIN	31	19	86	21	17	26	6.2	5.7	5.7	92	28	29
(+)	20.6	20.9	22.6	23.1	23.6	23.6	23.3	23.5	26.7	25.0	25.2	24.8

CAL YR 1970 TOTAL 18,020.1 MEAN 49.4 MAX 441 MIN 3.9 (+) 22.8
WTR YR 1971 TOTAL 30,012.9 MEAN 82.2 MAX 915 MIN 5.7 (+) 23.6

+ Diversion in cubic feet per second; furnished by city of Warren.

BEAVER RIVER BASIN

25

03098000 Mahoning River at Youngstown, Ohio

LOCATION.--Lat 41°06'40", long 80°40'23", Mahoning County, on left bank 400 ft upstream from Bridge Street Bridge in Youngstown, and 0.8 mile upstream from Mill Creek.

DRAINAGE AREA.--898 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Records for May 1903 to July 1906, published in WSP 98, 128, 169, and 205, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 826.53 ft above mean sea level, adjustment of 1912 (levels by Mahoning Valley Sanitary District). Prior to Nov. 16, 1926, nonrecording gage at site 400 ft downstream at same datum.

AVERAGE DISCHARGE.--50 years, 819 cfs.

EXTREMES.--Current year: Maximum discharge, 6,040 cfs Feb. 21 (gage height, 9.91 ft); minimum, 212 cfs June 12.

Period of record: Maximum discharge, 17,600 cfs Jan. 25, 1937 (gage height, 14.92 ft); from rating curve extended above 9,500 cfs on basis of velocity-area studies; maximum gage height, 18.62 ft Jan. 22, 1939 (backwater from Mill Creek); minimum discharge, 28 cfs Aug. 14, 1930; minimum daily, 30 cfs Aug. 16, 1930.

Flood of Mar. 26, 1913 reached a stage of 26.5 ft (discharge, 42,500 cfs, estimated by Corps of Engineer.).

REMARKS.--Records good. Water diverted above station for municipal supply for city of Youngstown. Some sewage returned to river above station. Water also diverted above and below station by a private company for industrial use, some of which is returned to river above station. Flow regulated by Berlin Reservoir (48 miles upstream), beginning in 1942, by Milton Reservoir (40 miles upstream), by Michael J. Kirwan Reservoir (43 miles upstream) on West Branch, beginning in 1956, by Mosquito Creek Reservoir (22 miles upstream), beginning in 1943, by Meander Creek Reservoir (11 miles upstream), beginning in 1929, (see pp. 29, 30), and by reservoir on Squaw Creek (5 miles upstream). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 623: 1924(M). WSP 1907: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	360	783	1,650	1,100	324	3,090	642	284	324	480	456	384
2	366	707	1,240	964	306	2,580	668	284	318	493	456	402
3	360	691	1,260	873	300	2,760	662	278	336	506	460	408
4	330	754	1,890	1,280	318	2,900	578	272	267	480	460	402
5	330	714	2,120	1,970	1,160	3,320	480	267	272	462	460	390
6	342	558	1,840	1,750	1,840	3,980	402	703	597	462	438	409
7	336	480	1,430	1,060	1,650	5,200	390	1,010	720	462	438	444
8	336	444	1,300	775	1,110	4,100	384	964	803	450	432	402
9	330	420	1,280	668	682	2,760	378	775	636	486	444	384
10	330	493	1,240	630	584	2,340	354	558	396	462	438	390
11	354	486	1,240	604	552	2,040	330	414	262	662	456	408
12	384	512	1,970	597	564	2,010	318	519	250	532	432	420
13	804	578	2,920	584	630	2,700	330	616	342	450	414	740
14	630	747	2,780	768	636	3,160	452	578	342	396	408	810
15	740	1,450	1,830	817	642	3,030	468	396	366	402	408	675
16	538	1,910	1,720	708	610	2,730	432	330	402	456	414	519
17	456	1,530	1,960	545	662	2,120	426	366	396	450	414	414
18	420	1,290	2,070	486	1,010	1,700	468	366	402	438	414	372
19	396	1,300	1,960	468	2,880	1,610	462	300	408	462	414	366
20	384	1,280	1,760	444	5,130	1,780	390	306	402	512	486	384
21	426	1,160	1,630	390	5,790	1,890	360	318	571	493	873	420
22	438	1,060	1,660	348	4,560	2,040	336	306	506	486	526	450
23	402	1,010	1,850	342	5,400	1,630	318	289	348	519	656	390
24	390	943	1,830	330	4,430	1,280	300	294	354	500	480	342
25	378	901	1,620	336	3,290	1,160	294	456	408	493	450	324
26	372	880	1,490	390	4,110	1,150	289	444	402	486	456	336
27	366	894	1,440	354	4,570	1,160	278	360	396	456	500	384
28	354	964	1,420	354	3,950	1,150	284	312	396	444	462	390
29	360	1,180	1,400	366	-----	1,110	284	354	408	462	512	402
30	512	1,610	1,360	366	-----	929	294	336	450	468	420	402
31	848	-----	1,340	330	-----	727	-----	330	-----	468	378	-----
TOTAL	13,372	27,729	52,500	20,997	57,690	70,136	12,051	13,385	12,480	14,778	14,455	12,962
MEAN	431	924	1,694	677	2,060	2,262	402	432	416	477	466	432
MAX	848	1,910	2,920	1,970	5,790	5,200	668	1,010	803	662	873	810
MIN	330	420	1,240	330	300	727	278	267	250	396	378	324
CAL YR 1970	TOTAL	314,194	MEAN	861	MAX	4,390	MIN	267				
WTR YR 1971	TOTAL	322,535	MEAN	884	MAX	5,790	MIN	250				

BEAVER RIVER BASIN

03098500 Mill Creek at Youngstown, Ohio

LOCATION.--Lat 41°04'19", long 80°41'26", in T.2N., R.2W., Mahoning County, on right bank 600 ft upstream from suspension bridge in Mill Creek Park at Youngstown, 1 mile downstream from Newport Dam, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--66.3 sq mi.

PERIOD OF RECORD.--October 1943 to September 1971 (discontinued as continuous-record station, converted to a crest-stage partial-record station). Prior to December 1943 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 896.52 ft above mean sea level.

AVERAGE DISCHARGE.--26 years, 56.1 cfs, (11.90 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,190 cfs Feb. 23 (gage height, 3.95 ft), minimum daily, 0.10 cfs Aug. 7-19.

Period of record: Maximum discharge, 6,100 cfs May 27, 1946 (gage height, 9.00 ft), from rating curve extended above 3,000 cfs by computation of peak flow over dam; minimum, 0.1 cfs Oct. 8, 1947, Aug. 26, 1949, Sept. 10-12, 1952, Feb. 3-9, 1954, many days in 1962, Oct. 29, 26, 27, 1963, Aug. 7-19, 1971.

Flood in March 1913 reached a discharge of 7,140 cfs at dam 1 mile downstream (computed by Mill Creek Park Association).

REMARKS.--Records good. Flow regulated intermittently by Newport Dam. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	516	188	30	15	162	41	15	12	6.4	9.6	3.4
2	14	371	115	29	15	111	42	15	13	7.1	7.1	3.4
3	20	274	94	27	17	83	38	15	73	7.1	6.4	2.8
4	14	211	238	154	20	55	32	15	25	5.8	5.8	2.9
5	9.6	142	214	244	180	65	28	15	16	5.3	60	2.9
6	8.2	94	148	138	262	77	27	175	162	4.8	.20	2.8
7	7.5	60	50	68	202	316	78	132	65	5.0	.10	4.7
8	8.7	50	72	41	132	282	27	132	32	5.0	.10	8.2
9	8.7	43	70	30	65	185	25	88	18	6.4	.10	9.1
10	9.4	88	66	27	46	132	24	50	14	5.8	.10	8.7
11	93	111	88	25	34	120	22	36	12	86	.10	6.1
12	176	92	306	27	36	125	20	95	10	58	.10	5.3
13	241	102	355	25	40	274	22	72	16	19	.10	32
14	178	175	250	83	44	296	38	46	19	13	.10	44
15	120	387	162	68	40	278	31	36	14	10	.10	24
16	75	268	113	39	46	202	25	32	10	9.1	.10	20
17	43	160	152	28	58	132	28	35	9.6	7.5	.10	11
18	30	100	182	22	131	90	37	29	9.1	7.8	.10	8.2
19	24	73	145	18	348	88	28	25	8.2	13	.10	10
20	22	88	113	17	808	122	23	20	7.5	9.1	3.5	10
21	35	128	84	16	760	125	20	16	137	7.1	16	14
22	68	96	94	16	760	145	20	15	88	6.8	14	10
23	50	68	132	17	990	109	18	14	58	5.8	42	7.5
24	35	44	115	16	494	86	17	14	25	6.1	11	6.4
25	27	35	79	18	264	81	16	20	18	7.8	6.1	6.1
26	24	36	58	32	254	73	16	19	14	8.2	8.7	7.8
27	23	44	44	24	320	70	15	14	12	10	15	15
28	22	68	30	20	244	61	16	14	10	7.5	8.7	20
29	24	135	38	18	-----	56	16	14	8.7	9.1	6.0	9.6
30	102	285	36	17	-----	49	15	12	7.5	10	4.8	8.7
31	419	-----	32	16	-----	43	-----	12	-----	14	3.9	-----
TOTAL	1,948.1	4,344	3,912	1,350	6,625	4,093	755	1,242	923.6	383.4	230.10	324.6
MEAN	62.8	145	126	43.5	237	132	25.2	40.1	30.8	12.4	7.42	10.8
MAX	419	516	355	244	990	316	42	175	162	86	60	44
MIN	7.5	35	32	16	15	43	15	12	7.5	4.8	.10	2.8
CFSM	.95	2.19	1.90	.66	3.57	1.99	.38	.60	.46	.19	.11	.16
IN.	1.09	2.44	2.19	.76	3.72	2.30	.42	.70	.52	.22	.13	.18

CAL YR 1970 TOTAL 31,629.9 MEAN 86.7 MAX 836 MIN 6.4 CFSM 1.31 IN 17.75
WTR YR 1971 TOTAL 26,130.80 MEAN 71.6 MAX 990 MIN .10 CFSM 1.08 IN 14.66

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	2230	3.71	1,050	2-23	0100	3.95	1,190

BEAVER RIVER BASIN

27

03099500 Mahoning River at Lowellville, Ohio

LOCATION.--Lat 41°02'12", long 80°32'11", in T.1 N., R.1 W., Mahoning County, on left bank 100 ft upstream from Washington Street Bridge at Lowellville, 1 mile upstream from Ohio-Pennsylvania State line, and 3 miles downstream from Yellow Creek.

DRAINAGE AREA.--1,073 sq mi.

PERIOD OF RECORD.--October 1942 to current year. Prior to August 1943 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 796.84 ft above mean sea level, adjustment of 1912. Prior to Oct. 26, 1944, non-recording gage at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.--29 years, 1,008 cfs.

EXTREMES.--Current year: Maximum discharge, 7,330 cfs Feb. 20 (gage height, 7.96 ft); minimum, 285 cfs June 12.

Period of record: Maximum discharge, 21,000 cfs Jan. 21, 1959 (gage height, 14.43 ft); minimum, 123 cfs June 29, 1932. Flood in March 1913 reached a stage of 17.8 ft.

REMARKS.--Records good. Flow regulated by 5 flood control reservoirs at points 21 to 58 miles upstream (see pp. 29, 30 and REMARKS for station 03098000), and by reservoirs on Squaw Creek (15 miles upstream), on Dry Run (9 miles upstream), and on Yellow Creek (5 miles upstream). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1555: 1946(M), 1952(M), 1955(M), 1956. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414	1,470	1,890	1,220	420	3,360	752	360	375	524	486	414
2	426	1,270	1,450	1,050	390	2,790	776	370	375	517	486	438
3	432	1,160	1,420	952	380	2,860	768	360	619	524	504	450
4	402	1,110	2,220	1,550	408	2,960	685	355	385	498	510	438
5	390	1,030	2,280	2,280	1,460	3,280	587	350	335	480	545	426
6	402	800	2,010	1,930	2,060	3,960	504	1,060	864	486	480	414
7	396	664	1,580	1,230	1,940	5,450	486	1,180	840	480	468	498
8	390	594	1,420	916	1,420	4,430	480	1,220	943	474	456	450
9	390	559	1,380	784	889	3,020	468	961	720	538	468	432
10	390	699	1,350	744	706	2,670	444	720	492	480	474	432
11	510	744	1,420	713	706	2,390	420	545	360	926	504	450
12	601	736	2,210	706	736	2,360	402	784	300	657	468	438
13	1,650	784	3,060	692	824	3,140	408	784	380	545	456	848
14	952	1,030	2,880	1,020	784	3,520	531	728	402	468	444	916
15	1,020	2,190	2,110	988	792	3,370	552	531	414	444	438	713
16	760	2,290	1,890	832	728	3,030	517	462	444	504	444	573
17	622	1,850	2,120	664	880	2,410	510	480	438	500	444	462
18	545	1,490	2,240	587	1,390	1,930	559	468	438	500	444	408
19	498	1,460	2,100	559	3,280	1,810	552	420	438	550	444	432
20	486	1,470	1,890	538	6,140	1,990	480	385	426	550	492	426
21	587	1,420	1,740	504	6,610	2,090	444	390	883	531	1,960	462
22	636	1,260	1,770	468	5,850	2,230	420	375	622	524	566	486
23	566	1,180	1,990	456	6,820	1,870	402	355	480	552	842	432
24	524	1,090	1,980	456	5,110	1,500	380	355	420	559	517	396
25	492	1,020	1,740	462	3,640	1,310	370	531	462	538	480	380
26	480	997	1,570	545	4,290	1,270	370	510	438	559	510	402
27	480	1,020	1,500	480	4,820	1,270	355	438	426	510	594	438
28	468	1,100	1,470	468	4,210	1,250	360	375	432	480	498	492
29	486	1,420	1,460	468	-----	1,220	355	396	444	517	538	450
30	848	2,000	1,400	474	-----	1,060	365	390	486	545	468	450
31	1,680	-----	1,380	450	-----	848	-----	375	-----	510	420	-----
TOTAL	18,923	35,907	56,920	25,186	67,683	76,648	14,702	17,013	15,081	16,470	16,848	14,446
MEAN	610	1,197	1,836	812	2,417	2,473	490	549	503	531	543	482
MAX	1,680	2,290	3,060	2,280	6,820	5,450	776	1,220	943	926	1,960	916
MIN	390	559	1,350	450	380	848	355	350	300	444	420	380

CAL YR 1970 TOTAL 383,340 MEAN 1,050 MAX 4,830 MIN 315
WTR YR 1971 TOTAL 375,827 MEAN 1,030 MAX 6,820 MIN 300

HEAVER RIVER BASIN

03102950 Pymatuning Creek at Kinsman, Ohio

LOCATION.--Lat 41°26'34", long 80°35'18", in T.7 N., R.1 W., Trumbull County, on left bank at downstream side of bridge on State Highway 7 at Kinsman, 0.6 mile downstream from Sugar Creek and 1.2 miles upstream from Stratton Creek.

DRAINAGE AREA.--96.7 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water stage recorder. Datum of gage is 906.8 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 102 cfs (14.33 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,310 cfs Feb. 21 (gage height, 11.14 ft); minimum, 0.12 cfs July 11, Sept. 6.

Period of record: Maximum discharge, 1,610 cfs Dec. 29, 1968 (gage height, 11.61 ft); minimum, 0.12 cfs July 11, Sept. 6, 1971.

REMARKS.--Records good except those for June, July and August which are fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	139	445	50	22	641	98	41	29	1.3	3.4	.30
2	20	173	398	44	20	465	91	39	23	1.1	3.0	.24
3	10	207	322	43	20	324	90	33	22	.84	2.4	.27
4	13	226	338	82	22	214	86	30	27	.55	2.0	.22
5	10	214	319	240	73	154	81	26	23	.41	2.1	.17
6	7.8	198	260	220	223	119	70	38	27	.38	1.6	.15
7	6.1	182	230	200	257	213	59	62	36	.21	1.1	.53
8	5.3	162	193	170	246	260	50	63	30	.17	1.0	.60
9	5.0	134	157	130	214	230	42	74	24	.18	1.2	.64
10	4.7	108	128	90	160	238	38	61	21	.15	1.3	.60
11	4.5	110	109	62	120	223	35	52	17	.21	1.4	.96
12	6.1	119	120	45	100	203	32	56	15	.68	1.5	.96
13	27	155	216	34	110	213	31	73	14	1.6	1.3	1.6
14	79	183	234	36	130	308	53	72	14	2.1	.96	5.1
15	156	326	234	49	150	415	65	66	12	2.2	.80	13
16	229	477	219	50	157	473	66	56	8.6	2.3	.84	24
17	257	463	215	41	151	473	63	48	7.6	2.2	.88	25
18	237	423	236	35	168	372	97	40	5.4	2.1	.68	15
19	192	332	218	29	295	286	96	31	4.5	2.0	.55	7.1
20	145	247	205	25	858	262	83	25	3.2	2.1	.55	4.5
21	101	206	185	23	1,280	242	65	23	5.6	2.3	.50	3.8
22	68	170	163	22	1,186	245	50	20	6.4	2.5	.36	4.6
23	48	134	176	22	1,150	231	39	18	6.0	2.1	.38	6.7
24	47	106	164	22	965	202	31	18	4.8	2.8	.34	6.9
25	48	89	139	22	762	178	26	37	3.8	4.1	.30	5.1
26	42	74	114	27	653	158	24	61	3.0	3.8	.30	3.8
27	31	81	95	36	735	148	21	70	2.5	4.0	.36	3.0
28	22	117	79	29	762	146	23	67	2.1	4.5	.36	2.6
29	16	184	72	26	-----	143	29	55	1.6	4.6	.33	2.4
30	19	370	61	24	-----	128	37	44	1.4	4.3	.31	2.8
31	80	-----	55	22	-----	111	-----	36	-----	4.0	.30	-----
TOTAL	1,968.5	6,109	6,099	1,954	11,003	8,018	1,671	1,435	402.5	61.78	32.90	142.65
MEAN	63.5	204	197	63.0	393	259	55.7	46.3	13.4	1.99	1.08	4.76
MAX	257	477	445	240	1,280	641	96	74	36	4.6	3.4	25
MIN	4.5	74	55	22	20	111	21	18	1.4	.15	.30	.15
CFSM	.66	2.11	2.04	.65	4.06	2.68	.58	.48	.14	.02	.01	.05
IN.	.76	2.35	2.35	.75	4.23	3.08	.64	.55	.15	.02	.01	.05

CAL YR 1970 TOTAL 38,481.21 MEAN 105 MAX 1,040 MIN .66 CFSM 1.09 IN 14.80

WTR YR 1971 TOTAL 38,897.33 MEAN 107 MAX 1,280 MIN .15 CFSM 1.11 IN 14.96

PEAK DISCHARGE (BASE, 700 CFS, revised).--Feb. 21 (1500) 1,310 cfs (11.14 ft).

Reservoirs in Beaver River basin

- 03090000 BERLIN RESERVOIR.--Lat 41°02'46", long 81°00'10", in T.1 N., R.6 W., Portage County at dam on Mahoning River, 3.2 miles northwest of Berlin Center. Drainage area, 248 sq mi. Period of record, December 1942 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 77,030 acre-ft Feb. 24 (elevation, 1,029.23 ft); minimum, 16,920 acre-ft Sept. 30 (elevation, 1,005.05 ft). Extremes for period of record: Maximum contents, 91,150 acre-ft July 9, 1943 (elevation, 1,032.0 ft); minimum, 1,540 acre-ft Jan. 10, 1944 (elevation, 978.82 ft). Reservoir is formed by earthfill dam with concrete spillway; storage began in December 1942. Usable capacity 91,150 acre-ft between elevations 956.5 ft (invert of lowest outlet) and 1,032.0 ft (top of taintor gates on controlled section) of which 1,800 acre-ft is in the conservation pool (elevation, 980.0 ft). No dead storage. Flow is normally controlled by sluiceways through dam but additional releases can be made through gates on controlled section of spillway. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Gage-height graph and capacity curve furnished by Corps of Engineers.
- 03091000 MILTON RESERVOIR.--Lat 41°07'38", long 80°58'40", in T.2 N., R.5 W., Mahoning County at dam on Mahoning River, 0.8 mile southwest of Pricetown. Drainage area, 273 sq mi. Period of record, December 1923 to current year. Month-end contents for some periods published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level (levels by city of Youngstown). Prior to Oct. 7, 1941, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 30,750 acre-ft Mar. 5 (elevation, 951.78 ft); minimum, 11,180 acre-ft Mar. 29 (elevation, 939.04 ft). Extremes for period of record: Maximum contents, 35,020 acre-ft June 29, 1924 (elevation, 953.8 ft) of which 5,870 acre-ft was in uncontrolled storage; minimum, 1,220 acre-ft Jan. 23, 1954 (elevation, 924.27 ft, from graph based on gage readings). Reservoir is formed by earthfill dam with concrete spillway; storage began in 1916. Usable capacity 29,150 acre-ft between elevations 906.0 ft (bottom of gates) and 951.0 ft (top of gates). No dead storage. Flow is regulated by two 16-inch and four 36-inch gates on spillway. Reservoir is used to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Capacity table computed from base data furnished by city of Youngstown, Division of Water.
- 03092450 MICHAEL J. KIRWAN RESERVOIR (formerly published as West Branch Reservoir).--Lat 41°09'24", long 81°04'47", in T.3 N., R.6 W., Portage County at dam on West Branch Mahoning River, 0.5 mile southwest of Wavland. Drainage area, 80.5 sq mi. Period of record, December 1966 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 55,590 acre-ft Feb. 24 (elevation, 985.10 ft); minimum, 34,550 acre-ft Sept. 30 (elevation, 975.95 ft). Extremes for period of record: Maximum contents, 61,800 acre-ft May 21, 1969 (elevation, 987.39 ft); minimum, 5,370 acre-ft Jan. 5, 1967 (elevation, 953.50 ft). Reservoir is formed by earthfill dam with concrete spillway; storage began in December 1966. Usable capacity 78,660 acre-ft between elevations 936.8 ft (lowest outlet) and 993.0 ft (crest of spillway) of which 3,740 acre-ft is in conservation pool. Dead storage below elevation 936.8 ft, 85 acre-ft. Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits in dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Gage-height graph and capacity curve furnished by Corps of Engineers.
- 03095000 MOSQUITO CREEK RESERVOIR.--Lat 41°17'58", long 80°45'31", in T.5 N., R.3 W., Trumbull County at dam on Mosquito Creek, 3 miles southwest of Cortland. Drainage area, 97.5 sq mi. Period of record, October 1943 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 79,310 acre-ft May 13 (elevation, 901.26 ft); minimum, 47,390 acre-ft Sept. 27, 30 (elevation, 896.59 ft). Extremes for period of record: Maximum contents, 99,100 acre-ft June 3, 1947 (elevation, 903.65 ft); minimum, 8,600 acre-ft Nov. 16, 1944 (elevation, 886.97 ft). Reservoir is formed by earthfill dam. A natural wasteway (elevation, 903.5 ft) discharges into the Grand River basin; storage began in October 1943. Usable capacity 102,700 acre-ft between elevations 881.0 ft (lowest outlet) and 904.00 ft (reservoir-full level). Dead storage below 881.0 ft, 2,000 acre-ft. Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits through dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Water is used for industrial purposes in vicinity of Warren and Youngstown; and for municipal supply of city of Warren. Gage-height graph and capacity curve furnished by Corps of Engineers.
- 03097000 MEANDER CREEK RESERVOIR.--Lat 41°09'12", long 80°46'45", in T.3 N., R.3 W., Trumbull County on right side of spillway near center of dam on Meander Creek, 0.8 mile northwest of Mineral Ridge. Drainage area, 83.9 sq mi. Period of record, November 1929 to current year. Month-end contents for some periods published in WSP 1305. Water-stage recorder. Datum of gage is at mean sea level (levels by Mahoning Valley Sanitary District). Extremes for current year: Maximum contents, 37,950 acre-ft Feb. 23 (elevation, 907.61 ft); minimum, 22,550 acre-ft Sept. 30 (elevation, 899.41 ft). Extremes for period of record: Maximum contents, 41,800 acre-ft Jan. 21, 1959 (elevation, 909.25 ft); minimum, 9,370 acre-ft Feb. 28, 1954 (elevation, 888.78 ft). Reservoir is formed by earthfill dam with concrete spillway; storage began in 1929. Usable capacity at spillway level (elevation, 905 ft), 32,410 acre-ft. No dead storage. Figures given herein represent usable contents. Water is used for municipal supply of cities of Niles and Youngstown. Gage-height graph furnished by Corps of Engineers. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.

BEAVER RIVER BASIN

Reservoirs in Beaver River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03090000 Berlin Reservoir				03091000 Milton Reservoir		
Sept. 30.....	1,010.43	24,000	-	947.44	22,550	-
Oct. 31.....	1,013.96	30,050	+6,050	943.53	16,630	-5,920
Nov. 30.....	1,020.51	45,080	+15,030	941.82	14,430	-2,200
Dec. 31.....	1,018.11	38,890	-6,190	940.82	13,230	-1,200
CAL YR 1970.....	-	-	-420	-	-	-4,880
Jan. 31.....	1,017.02	36,360	-2,530	939.41	11,600	-1,630
Feb. 28.....	1,028.77	74,890	+38,530	944.33	17,720	+6,120
Mar. 31.....	1,024.94	59,160	-15,730	940.29	12,600	-5,120
Apr. 30.....	1,020.49	45,020	-14,140	948.19	23,860	+11,260
May 31.....	1,021.21	47,050	+2,030	947.48	22,620	-1,240
June 30.....	1,021.38	47,550	+500	948.10	23,700	+1,080
July 31.....	1,017.60	37,700	-9,850	947.89	23,330	-370
Aug. 31.....	1,011.04	24,950	-12,750	947.85	23,260	-70
Sept. 30.....	1,005.05	16,920	-8,030	947.95	23,430	+170
WTR YR 1971.....	-	-	-7,080	-	-	+880

03092450 Michael J. Kirwan Reservoir				03095000 Mosquito Creek Reservoir		
Sept. 30.....	982.26	48,420	-	899.12	63,560	-
Oct. 31.....	981.42	46,400	-2,020	899.12	63,560	0
Nov. 30.....	980.79	44,920	-1,480	899.18	63,980	+420
Dec. 31.....	979.75	42,550	-2,370	899.13	63,630	-350
CAL YR 1970.....	-	-	+7,550	-	-	+6,380
Jan. 31.....	979.84	42,750	+200	899.02	62,850	-780
Feb. 28.....	983.70	51,990	+9,240	901.19	78,760	+15,910
Mar. 31.....	984.40	53,780	+1,790	901.14	78,360	-400
Apr. 30.....	984.28	53,470	-310	901.13	78,290	-70
May 31.....	984.40	53,780	+310	901.12	78,210	-80
June 30.....	981.79	47,280	-6,500	900.32	72,170	-6,040
July 31.....	979.72	42,480	-4,800	898.68	60,580	-11,590
Aug. 31.....	978.02	38,770	-3,710	897.22	51,170	-9,410
Sept. 30.....	975.95	34,550	-4,220	896.59	47,390	-3,780
WTR YR 1971.....	-	-	-13,870	-	-	-16,170

03097000 Meander Creek Reservoir			
Sept. 30.....	901.95	26,730	-
Oct. 31.....	900.57	24,400	-2,330
Nov. 30.....	901.74	26,370	+1,970
Dec. 31.....	903.94	30,360	+3,990
CAL YR 1970.....	-	-	+11,700
Jan. 31.....	903.57	29,670	-690
Feb. 28.....	906.67	35,870	+6,200
Mar. 31.....	906.35	35,180	-690
Apr. 30.....	905.02	32,450	-2,730
May 31.....	904.50	31,440	-1,010
June 30.....	903.27	29,100	-2,340
July 31.....	901.88	26,610	-2,490
Aug. 31.....	900.45	24,210	-2,400
Sept. 30.....	899.41	22,550	-1,660
WTR YR 1971.....	-	-	-4,180

LITTLE BEAVER CREEK BASIN

31

03109500 Little Beaver Creek near East Liverpool, Ohio

LOCATION.--Lat 40°40'33", long 80°32'27", Columbiana County, on right bank at downstream side of Grimm Bridge, 1.5 miles upstream from Island Run, 4 miles upstream from mouth and 4 miles northeast of East Liverpool.

DRAINAGE AREA.--496 sq mi.

PERIOD OF RECORD.--May 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft above mean sea level, adjustment of 1912. Prior to Sept. 22, 1926, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--56 years, 501 cfs (13.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,750 cfs Feb. 22 (gage height, 10.97 ft); minimum, 36 cfs Aug. 19, 20.
Period of record: Maximum discharge, 25,000 cfs July 19, 1941 (gage height, 17.4 ft), from rating curve extended above 16,000 cfs on basis of slope-area measurement of peak flow; minimum, 12 cfs several days in 1918, 1930, 1932, 1936.
Maximum stage observed, about 20 ft.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1937(M). WSP 1305: 1916-18(M), 1921-22(M), 1924-30(M), 1933(M), 1936(M). WSP 1907: 1950(P), Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	3,400	1,270	380	230	1,340	466	175	146	99	79	74
2	115	2,000	974	360	220	1,080	466	180	140	119	75	47
3	121	1,680	998	350	220	932	442	188	146	102	91	64
4	123	1,500	2,150	972	240	725	400	178	157	88	97	53
5	108	1,240	1,900	1,580	1,400	776	368	170	152	82	91	48
6	97	968	1,330	1,000	1,700	842	354	768	499	75	80	43
7	92	770	1,020	500	1,110	2,430	347	914	810	71	72	43
8	88	625	860	450	715	2,080	322	842	392	66	60	75
9	84	544	788	420	466	1,370	302	720	254	76	53	61
10	82	700	725	400	390	1,150	299	552	202	121	55	53
11	546	1,050	725	400	380	1,160	284	462	170	511	51	56
12	896	932	1,760	400	420	1,190	269	466	198	730	48	66
13	824	932	2,450	389	450	3,170	266	557	386	336	46	128
14	830	980	1,840	530	420	2,640	284	466	316	210	45	172
15	570	2,200	1,320	566	400	2,310	281	389	225	155	44	144
16	486	2,060	1,090	422	390	1,910	260	361	188	150	42	107
17	347	1,450	1,310	350	410	1,420	257	446	163	130	39	102
18	269	1,060	1,320	330	900	1,120	281	389	146	112	37	88
19	225	878	1,130	310	2,400	1,080	266	330	132	105	38	82
20	200	812	968	300	5,080	1,220	240	296	121	142	36	102
21	293	986	830	290	4,640	1,080	228	272	1,000	112	37	99
22	562	842	908	270	5,680	1,090	225	242	770	97	44	94
23	462	700	1,090	250	6,630	956	218	222	410	85	60	115
24	358	580	968	270	3,330	848	208	210	248	86	62	80
25	296	510	782	290	2,020	755	198	225	190	107	56	60
26	257	490	650	300	1,920	715	188	228	161	99	56	64
27	232	494	550	280	2,190	660	182	212	144	97	55	78
28	210	530	500	270	1,900	625	182	195	124	84	49	74
29	200	650	450	260	-----	598	182	180	112	82	50	72
30	714	1,610	420	250	-----	548	180	166	104	86	44	71
31	4,000	-----	400	240	-----	498	-----	157	-----	88	42	-----
TOTAL	13,821	33,173	33,496	13,379	46,251	38,318	8,445	11,158	8,206	4,503	1,734	2,415
MEAN	446	1,106	1,081	432	1,652	1,236	282	360	274	145	55.9	80.5
MAX	4,000	3,400	2,450	1,580	6,630	3,170	466	914	1,000	730	97	172
MIN	82	490	400	240	220	498	180	157	104	66	36	43
CFSM	.90	2.23	2.18	.87	3.33	2.49	.57	.73	.55	.29	.11	.16
IN.	1.04	2.49	2.51	1.00	3.47	2.87	.63	.84	.62	.34	.13	.18

CAL YR 1970 TOTAL 224,248 MEAN 614 MAX 4,220 MIN 54 CFSM 1.24 IN 16.82
WTR YR 1971 TOTAL 214,899 MEAN 589 MAX 6,630 MIN 36 CFSM 1.19 IN 16.12

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	1700	8.84	5,180	2-22	1930	10.97	8,750
2-20	2100	9.73	6,570				

YELLOW CREEK BASIN

03110000 Yellow Creek near Hammondsville, Ohio

LOCATION.--Lat 40°32'16", long 80°43'31", in sec.29, T.8 N., R.2 W., Jefferson County, on right bank 1,000 ft upstream from Lowery Run, 0.9 mile upstream from Brush Creek, and 1.6 miles southwest of Hammondsville.

DRAINAGE AREA.--147 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 692.10 ft above mean sea level (Ohio State Highway Department bench mark).

AVERAGE DISCHARGE.--31 years, 153 cfs (14.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,480 cfs May 6 (gage height, 7.66 ft); minimum, 4.6 cfs Sept. 7, 8.

Period of record: Maximum discharge, 9,580 cfs Jan. 27, 1952 (gage height, 12.17 ft); minimum, 0.8 cfs Sept. 24 to Oct. 1, Oct. 7, 8, 1963.

The highest stage observed is reported to have occurred in 1912.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	655	166	130	65	380	146	40	65	20	19	7.7
2	17	370	156	120	62	315	150	39	60	22	17	7.7
3	16	502	150	108	58	276	137	43	62	22	21	6.0
4	22	415	346	393	78	243	120	41	60	16	60	6.0
5	15	319	294	573	500	222	113	37	58	13	39	6.4
6	13	232	252	361	284	233	106	1,840	70	12	29	5.2
7	12	185	206	260	160	693	104	1,200	260	11	21	5.2
8	11	154	177	180	131	677	98	683	131	11	17	5.2
9	10	133	165	150	82	458	93	454	89	28	14	6.5
10	10	182	150	130	100	374	88	333	71	20	12	6.2
11	146	245	143	130	100	362	80	267	60	172	12	6.4
12	213	208	530	130	110	338	76	253	58	207	10	12
13	102	191	609	128	110	1,700	77	259	64	72	9.8	45
14	75	181	459	167	100	1,070	87	216	66	45	8.8	71
15	62	474	343	165	100	752	78	192	56	34	8.3	33
16	51	400	284	123	110	580	72	174	55	28	8.6	22
17	40	294	341	110	120	440	72	295	45	26	8.0	25
18	34	241	289	100	250	346	78	223	39	22	6.8	24
19	30	202	260	95	550	329	65	188	35	26	6.1	21
20	27	185	231	95	1,420	334	62	164	31	65	6.5	27
21	38	246	203	90	976	294	61	144	29	39	6.1	24
22	98	271	288	95	1,400	345	63	126	31	26	7.1	18
23	69	156	406	80	1,640	316	61	113	26	21	8.7	15
24	56	122	360	60	844	282	57	175	24	21	9.3	13
25	58	111	294	90	573	243	55	121	22	44	7.2	11
26	98	110	264	95	546	233	52	117	20	37	9.2	11
27	86	109	227	56	576	213	50	99	19	29	11	12
28	72	109	196	85	487	25	51	88	19	26	12	14
29	52	108	176	80	-----	197	53	83	20	23	8.8	13
30	113	186	146	75	-----	178	46	79	19	24	8.7	13
31	896	-----	140	70	-----	156	-----	71	-----	22	6.5	-----
TOTAL	2,561	7,296	8,239	4,544	11,532	12,988	2,456	8,089	1,664	1,184	428.5	492.5
MEAN	82.6	243	266	147	412	419	81.9	261	55.5	38.2	13.8	16.4
MAX	896	655	609	573	1,640	1,700	150	1,840	260	207	60	71
MIN	10	108	140	56	58	156	46	37	19	11	6.1	5.2
CFSM	.56	1.65	1.81	1.00	2.80	2.85	.56	1.78	.38	.26	.09	.11
IN.	.65	1.95	2.08	1.15	2.92	3.29	.62	2.05	.42	.30	.11	.12

CAL YR 1970 TOTAL 66,259.2 MEAN 182 MAX 1,800 MIN 6.2 CFSM 1.24 IN 14.77

WTR YR 1971 TOTAL 61,474.0 MEAN 168 MAX 1,840 MIN 5.2 CFSM 1.14 IN 15.56

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	2130	6.21	2,150	5-6	2100	7.66	3,480
3-13	1230	6.41	2,320				

03111500 Short Creek near Dillonvale, Ohio

LOCATION.--Lat 40°11'36", long 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, on right bank at downstream side of bridge on State Highway 150, 2.1 miles east of Dillonvale, 2.2 miles downstream from Jug Run, and 2.9 miles upstream from Little Short Creek.

DRAINAGE AREA.--123 sq. mi.

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.1 ft above mean sea level (State of Ohio bench mark). Prior to Oct. 21, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 119 cfs (13.14 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,110 cfs May 6 (gage height, 7.60 ft); minimum, 20 cfs Aug. 25.

Period of record: Maximum discharge, 6,500 cfs Mar. 6, 1945; maximum gage height, 10.15 Mar. 5, 1963 (from graph based on gage readings); minimum daily, 2.8 cfs Sept. 21, 27, 1947.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1003: 1942-43. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	445	127	130	65	262	160	80	90	50	21	20
2	35	245	117	129	60	243	170	85	90	60	51	29
3	41	368	117	123	60	230	145	100	85	55	60	28
4	37	252	153	410	80	214	138	90	85	48	67	27
5	34	198	135	398	700	192	132	85	120	46	80	26
6	33	154	123	250	241	194	127	1,550	220	44	48	26
7	34	132	112	187	164	618	124	673	140	42	45	40
8	39	115	103	171	140	385	120	458	120	40	43	35
9	43	105	102	160	130	296	114	348	111	30	42	31
10	49	176	100	160	120	276	117	252	100	40	38	28
11	87	198	103	154	110	270	112	104	90	100	40	20
12	62	156	549	150	130	268	108	166	85	210	39	26
13	69	138	440	144	248	400	105	300	80	60	33	160
14	70	136	284	189	173	340	110	250	130	51	31	100
15	61	316	221	169	159	320	103	200	100	44	30	58
16	68	227	201	138	132	286	100	190	90	50	31	54
17	59	176	228	130	223	264	96	170	78	49	26	60
18	55	156	196	120	388	237	97	160	69	48	23	46
19	54	147	183	110	466	227	96	150	60	49	21	45
20	52	154	165	110	510	230	94	140	62	49	21	43
21	132	160	154	100	355	232	94	130	57	40	23	40
22	132	138	268	100	1,040	232	94	130	52	40	32	35
23	85	126	320	90	872	230	94	120	49	48	27	31
24	75	111	264	95	478	218	92	110	47	44	22	31
25	71	114	218	109	365	191	90	150	46	134	20	29
26	70	100	198	106	328	180	88	120	44	72	60	33
27	68	105	180	55	322	180	87	110	44	64	44	35
28	65	106	165	74	300	176	110	100	42	54	36	32
29	69	114	154	70	-----	174	95	100	50	50	34	30
30	246	159	150	70	-----	164	87	95	60	58	31	51
31	1,150	-----	141	65	-----	154	-----	90	-----	54	30	-----
TOTAL	3,221	5,227	5,971	4,466	8,361	7,882	3,303	6,886	2,515	1,886	1,161	1,300
MEAN	104	174	193	144	299	254	110	222	83.8	60.8	37.5	43.3
MAX	1,150	445	549	410	1,040	618	170	1,550	220	210	67	160
MIN	33	100	100	55	60	153	87	80	42	30	20	26
CFSM	.85	1.41	1.57	1.17	2.43	2.07	.89	1.80	.68	.69	.30	.35
IN.	.97	1.58	1.81	1.35	2.53	2.38	1.00	2.08	.76	.57	.35	.39
CAL YR 1970 TOTAL	48,741											
MEAN 134												
MAX 1,350												
MIN 28												
CFSM 1.09												
IN 14.74												
WTR YR 1971 TOTAL	52,179											
MEAN 143												
MAX 1,550												
MIN 20												
CFSM 1.16												
IN 15.78												

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	1700	5.12	1,560	5-6	1330	7.60	3,110
2-22	1500	5.17	1,580				

CAPTINA CREEK BASIN

03114000 Captina Creek at Armstrongs Mills, Ohio

LOCATION.--Lat 39°54'31", long 80°55'27", in NE 1/4 sec.10, T.5 N., R.4 W., Belmont County, on left bank at downstream side of bridge on State Highway 148, 0.5 mile east of Armstrongs Mills, and 0.7 mile downstream from Anderson Run.

DRAINAGE AREA.--134 sq mi.

PERIOD OF RECORD.--August 1926 to September 1935, October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 739.53 ft above mean sea level. Aug. 20, 1926, to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft higher.

AVERAGE DISCHARGE.--22 years, 150 cfs (15.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,350 cfs May 6 (gage height, 10.50 ft); minimum, 0.73 cfs Aug. 21.

Period of record: Maximum discharge, about 11,800 cfs Mar. 4, 1963; maximum gage height, 14.40 ft, present datum, Aug. 7, 1935; no flow at times during 1929-30, 1932, 1934, 1959, 1963-66.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	846	215	120	44	224	98	29	40	13	11	5.8
2	14	440	192	110	42	200	109	31	40	16	7.6	4.9
3	17	1,210	160	100	40	182	94	38	46	13	12	4.4
4	17	495	242	1,210	80	179	82	32	40	8.7	38	3.5
5	13	330	209	720	1,630	185	76	29	67	6.7	36	3.2
6	11	236	179	338	374	165	71	2,550	105	5.6	19	3.0
7	9.6	188	153	240	218	678	71	678	80	4.9	12	25
8	9.0	152	133	200	170	386	64	1,080	51	4.0	8.0	23
9	9.0	130	125	170	125	267	60	440	37	4.9	5.8	12
10	8.6	351	113	150	110	248	60	260	31	21	4.9	8.0
11	11	378	109	130	100	274	52	199	27	21	4.0	14
12	24	264	2,720	120	153	278	49	196	26	36	3.2	505
13	20	218	1,010	116	780	346	51	310	84	19	2.7	1,340
14	22	200	535	271	309	288	66	256	103	12	2.4	346
15	86	434	350	230	239	260	55	196	56	8.0	1.9	140
16	45	330	306	158	168	236	48	170	40	6.7	1.6	334
17	29	254	414	140	327	200	48	178	31	5.8	1.3	314
18	23	218	327	120	565	170	51	145	26	4.9	1.1	163
19	20	182	278	100	666	182	43	125	23	4.4	8.0	133
20	18	188	230	90	708	200	40	108	21	4.4	8.0	196
21	96	197	209	80	442	194	40	94	20	4.0	1.1	110
22	122	168	921	75	2,280	242	49	82	21	3.2	11	75
23	66	152	810	70	1,450	221	43	71	18	2.7	78	59
24	48	122	714	75	575	197	38	67	15	4.4	29	49
25	38	135	398	80	374	173	36	88	14	25	17	40
26	32	135	302	70	309	168	33	73	12	17	37	34
27	28	116	248	65	354	153	31	59	12	12	30	40
28	25	111	203	60	264	145	37	54	11	9.4	19	34
29	25	144	185	55	-----	135	37	51	12	7.6	12	30
30	752	284	165	50	-----	118	32	52	13	9.4	8.0	147
31	3,500	-----	140	46	-----	105	-----	45	-----	12	6.7	-----
TOTAL	5,153.2	8,608	12,285	5,559	12,496	6,999	1,664	7,786	1,122	326.9	422.90	4,195.8
MEAN	166	287	396	179	461	226	55.5	251	37.4	10.5	13.6	140
MAX	3,500	1,210	2,720	1,210	2,280	678	109	2,550	105	36	78	1,340
MIN	8.6	111	109	46	40	105	31	29	11	2.7	8.0	3.0
CFSM	1.24	2.14	2.96	1.34	3.44	1.69	.41	1.87	.29	.08	.10	1.04
IN.	1.43	2.39	3.41	1.54	3.58	1.94	.46	2.16	.31	.09	.12	1.16

CAL YR 1970 TOTAL 73,867.6 MEAN 202 MAX 4,030 MIN 8.2 CFSM 1.51 IN 20.51
WTR YR 1971 TOTAL 67,017.80 MEAN 184 MAX 3,500 MIN .80 CFSM 1.37 IN 18.60

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	0630	9.01	5,490	2-22	1100	8.98	5,460
12-12	1300	9.30	5,840	5-6	1000	10.50	7,350
2-5	0600	7.68	3,900	9-13	0930	6.88	3,020

03115400 Little Muskingum River at Bloomfield, Ohio

LOCATION.--Lat 39°33'47", long 81°12'14", in sec.22, T.3 N., R.6 W., Washington County, on left bank 400 ft upstream from bridge on State Highway 260 at Bloomfield, 2.2 miles downstream from Wilson Run.

DRAINAGE AREA.--210 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 645.99 ft above mean sea level.

AVERAGE DISCHARGE.--13 years, 230 cfs (14.88 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,430 cfs Oct. 31 (gage height, 23.73 ft); minimum, 1.6 cfs Aug. 20, 21.

Period of record: Maximum discharge, 21,200 cfs Mar. 5, 1963 (gage height, 28.08 ft), from rating curve extended above 8,000 cfs on basis of velocity-area study and flow over road computations; no flow Sept. 18, 26, 27, 1967.

REMARKS.--Records good except those for February which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1705: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	4,230	242	173	75	341	127	48	50	4.5	24	14
2	16	753	221	147	70	290	135	47	50	4.5	15	10
3	15	1,240	191	135	62	260	135	59	62	4.7	16	7.9
4	15	866	449	845	120	242	113	58	69	5.2	125	6.7
5	13	494	456	1,610	2,500	203	103	49	51	5.0	245	5.5
6	11	329	338	683	600	239	99	320	54	6.4	89	5.3
7	9.0	251	260	359	350	1,400	99	732	83	5.7	36	12
8	8.6	197	215	296	250	866	91	1,760	100	4.6	19	13
9	7.5	155	188	272	200	485	83	828	59	4.1	12	7.9
10	6.4	383	164	221	170	407	80	422	41	4.3	8.2	5.5
11	6.7	982	144	191	150	411	71	287	32	6.5	5.8	7.1
12	53	524	1,720	173	250	404	66	251	27	10	4.0	254
13	63	350	1,850	158	700	476	66	454	26	14	3.3	2,200
14	58	275	705	250	500	404	87	583	37	10	3.0	1,820
15	338	446	460	400	380	353	85	371	44	8.3	2.8	278
16	194	509	347	310	300	347	75	287	42	7.1	2.8	272
17	99	365	428	250	250	290	73	347	27	6.2	2.6	539
18	66	293	470	210	600	248	76	302	20	4.4	2.4	275
19	48	242	383	180	900	245	68	237	16	3.3	2.8	191
20	37	263	308	150	1,200	278	62	189	14	3.1	2.1	548
21	135	421	263	130	850	266	60	152	12	2.7	1.7	272
22	470	341	1,710	120	3,500	317	65	123	14	2.1	1.9	158
23	227	314	2,190	110	2,450	320	63	102	11	2.2	2.4	105
24	135	248	1,770	127	876	284	58	90	9.4	4.3	17	80
25	95	200	778	120	551	254	53	98	8.6	9.6	15	59
26	73	179	509	110	418	242	48	101	8.4	5.5	42	158
27	58	170	362	103	524	218	47	75	7.3	6.7	133	215
28	46	155	290	95	460	200	59	65	6.3	7.7	173	170
29	42	147	239	91	-----	185	63	60	5.0	10	65	120
30	800	212	206	85	-----	161	53	64	4.6	15	32	83
31	6,580	-----	185	80	-----	138	-----	60	-----	24	20	-----
TOTAL	9,746.2	15,534	18,041	8,184	19,256	10,774	2,363	8,621	990.6	211.7	1,123.8	7,891.9
MEAN	314	518	582	264	688	348	78.8	278	33.0	6.83	36.3	263
MAX	6,580	4,230	2,190	1,610	3,500	1,400	135	1,760	100	24	245	2,200
MIN	6.4	147	144	80	62	138	47	4.6	4.6	2.1	1.7	5.3
CFSM	1.50	2.47	2.77	1.26	3.28	1.66	.38	1.32	.16	.03	.17	1.25
IN.	1.73	2.75	3.20	1.45	3.41	1.91	.42	1.53	.18	.04	.20	1.40

CAL YR 1970 TOTAL 109,222.0 MEAN 299 MAX 6,580 MIN 5.8 CFSM 1.42 IN 19.35
WTR YR 1971 TOTAL 102,737.2 MEAN 281 MAX 6,580 MIN 1.7 CFSM 1.34 IN 18.20

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	2000	23.73	8,430	2-22	unknown	unknown	about 4,700
12-12	2300	16.94	3,480	9-13	2300	18.30	4,180
12-22	2000	15.69	3,010				
2-5	unknown	unknown	about 3,900				

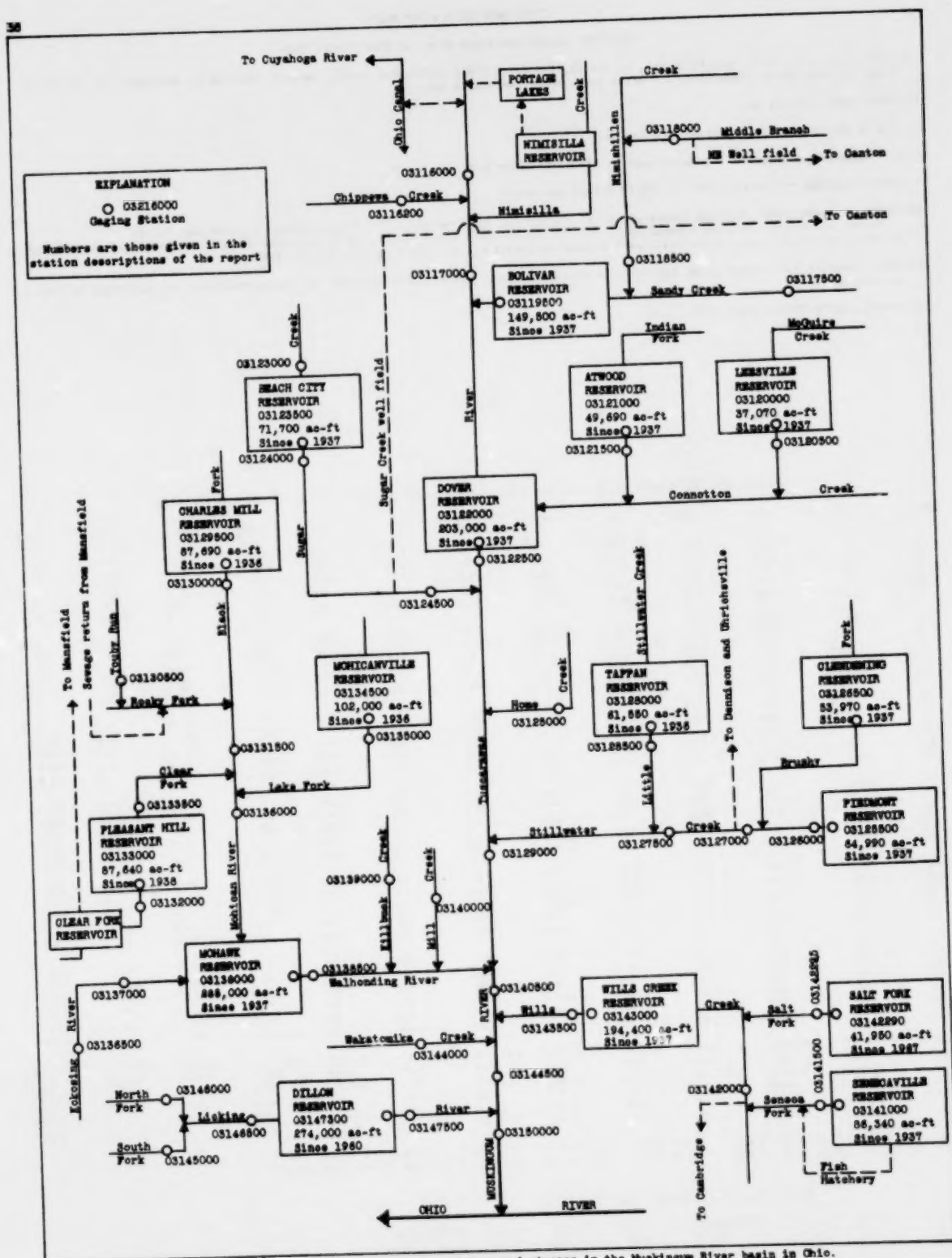


Figure 4.--Schematic diagram showing diversions and storage in the Muskingum River basin in Ohio.

37

LOCATION.--Lat 40°55'40", long 81°37'58", in NW1/4 sec.32, T.2N., R.10W., Summit County, on right bank 100 ft downstream from highway bridge at Clinton, and 1 mile upstream from Chippewa Creek.

PERIOD OF RECORD.--May 1926 to current year.

GAGE.—Water-stage recorder. Datum of gage is 933.28 ft above mean sea level, adjustment of 1912. Prior to Nov. 18, 1928, nonrecording gage at site 100 ft upstream at datum 4.00 ft higher. Nov. 18, 1928, to July 24, 1930, nonrecording gage at same site at present datum.

AVERAGE DISCHARGE.-- 42 years, (1929-71), 137 cfs.

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Feb. 21 (gage height, 10.70 ft); maximum gage height, 11.54 ft Feb. 23 (backwater from Chippewa Creek); minimum discharge, 54 cfs Aug. 30.

Period of record: Maximum discharge, 2,700 cfs Aug. 8, 1935; maximum gage height, 17.00 ft July 7, 1969 (backwater from Chippewa Creek); minimum discharge, 10 cfs Nov. 6, 1928.

REMARKS.--Records poor. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake 12 miles upstream and 3 miles south of Akron. Part of the diverted water flows through the Ohio Canal into the Cuyahoga River basin. Flow affected by industrial plants above station and supplemented at times by diversion from Nimisila Reservoir (capacity, 6,500 acre-ft) since 1939. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	98	290	104	77	450	127	80	75	74	64	58
2	70	160	230	104	74	290	138	79	76	71	64	62
3	68	550	200	99	74	216	133	80	84	66	64	63
4	65	410	350	185	76	177	118	80	81	65	68	58
5	60	320	280	373	462	176	112	82	84	64	66	57
6	60	409	218	205	550	196	109	160	84	64	66	60
7	60	223	161	131	390	405	105	148	84	69	66	68
8	66	166	139	112	247	300	100	186	88	70	64	70
9	66	146	135	104	150	230	100	152	84	68	64	62
10	67	134	131	98	137	215	97	121	78	68	64	60
11	69	127	163	97	124	204	93	106	78	78	64	60
12	70	120	445	99	159	206	93	147	74	90	65	56
13	308	104	750	96	183	397	104	166	74	74	65	100
14	318	96	650	156	150	529	118	127	78	66	65	134
15	165	398	550	152	138	500	110	106	76	68	65	93
16	116	470	430	109	126	450	108	94	76	76	64	78
17	93	340	363	103	146	350	99	98	74	68	63	68
18	80	216	322	96	297	297	95	101	74	68	64	61
19	76	152	247	93	605	237	90	91	72	75	62	59
20	74	142	204	89	998	281	87	85	70	94	60	89
21	82	152	167	90	1,070	269	86	83	95	78	62	111
22	102	128	187	90	1,070	300	86	78	74	73	66	74
23	89	115	290	88	1,000	230	84	76	72	68	64	69
24	79	100	225	86	950	220	82	77	70	102	60	64
25	73	92	160	87	850	204	80	98	70	107	57	64
26	71	88	136	97	700	196	80	128	66	76	60	64
27	71	84	130	85	600	183	80	102	68	76	72	64
28	68	112	122	87	600	176	81	84	67	73	65	69
29	70	196	118	84	-----	169	82	78	70	71	60	65
30	109	440	110	81	-----	148	80	74	74	69	60	62
31	112	-----	106	78	-----	131	-----	74	-----	66	60	-----
TOTAL	2,949	6,288	8,009	3,558	12,003	8,332	2,957	3,251	2,290	2,295	1,973	2,122
MEAN	95.1	210	258	115	429	269	98.6	105	76.3	74.0	63.6	70.7
MAX	318	550	750	373	1,070	529	138	186	95	107	72	134
MIN	60	84	106	78	74	131	80	74	66	64	57	50

MUSKINGUM RIVER BASIN

03116200 Chippewa Creek at Easton, Ohio

LOCATION.--Lat 40°56'47", long 81°44'35", in SW 1/4 sec. 17, T.18N., R.11W., Wayne County, on left bank at downstream side of bridge on State Highway 585, 0.5 mile southwest of Easton, and 1.5 miles upstream from Red Run.

DRAINAGE AREA.--146 sq. mi.

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 939.60 ft above mean sea level. Prior to June 10, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 113 cfs (10.51 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,450 cfs Feb. 23 (gage height, 11.54 ft); minimum, 5.0 cfs Aug. 18, 23.
Period of record: Maximum discharge, 12,500 cfs July 5, 1969 (gage height, 16.02 ft); minimum, 2.8 cfs July 6, 1963.
Flood of Jan. 21, 1959 reached a stage of 14.17 ft (discharge, 10,100 cfs, result of contracted-opening measurement of peak flow).

REMARKS.--Records good. Low flow slightly regulated by industry at Rittman 2.5 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	61	329	69	39	360	95	27				
2	19	241	200	64	39	274	109	27	27	14	8.6	6.7
3	25	895	179	59	41	202	97	29	37	11	8.2	6.5
4	17	826	486	236	48	151	82	28	32	9.7	10	7.7
5	15	520	294	356	654	149	76	27	28	9.0	9.5	7.9
6	20	311	184	154	800	184	72	120	36	9.7	8.6	6.9
7	20	185	131	133	441	474	68	104	32	9.0	7.3	9.8
8	19	129	113	121	232	285	62	172	34	9.0	6.3	23
9	19	99	108	95	180	196	58	127	29	11	6.3	8.6
10	22	84	101		160	176	53	86	25	10	6.9	7.3
11	24	86	166	64	138	163	49	71	22	59	7.5	7.3
12	21	77	559	61	123	196	47	141	21	44	7.3	6.3
13	456	76	940	55	174	588	41	139	34	16	6.7	34
14	256	86	802	134	170	559	68	93	29	12	6.3	62
15	119	589	515	88	134	558	56	72	24	11	6.1	19
16	78	472	346	66	98	535	49	60	22	15	5.5	13
17	61	256	371	65	132	360	48	68	20	13	5.5	12
18	51	167	307	60	371	262	53	60	18	10	5.5	11
19	39	129	245	55	712	254	44	46	16	11	5.5	11
20	36	125	192	55	1,010	305	41	41	14	25	6.5	22
21	41	130	151	52	1,010	279	39	37	18	13	6.7	40
22	83	105	223	51	895	390	37	33	17	9.7	8.4	20
23	60	87	325	45	1,370	287	35	28	14	8.6	6.3	15
24	46	72	209	40	1,210	209	33	27	12	60	5.5	14
25	39	62	139	42	800	183	30	54	13	48	5.5	20
26	35	62	114	54	666	167	28	87	13	20	6.1	21
27	32	64	106	60	678	155	29	71	11	20	6.1	20
28	31	103	92	56	516	152	29	57	11	13	6.1	20
29	30	269	86	46	-----	137	29	46	38	11	5.7	19
30	64	594	77	49	-----	117	27	36	20	10	5.7	16
31	84	-----	74	42	-----	101	-----	30	-----	10	6.3	-----
TOTAL	1,882	6,962	8,164	2,603	12,841	8,408	1,584	2,044	694	543.7	212.9	493.7
MEAN	60.7	232	263	84.0	455	271	52.8	65.9	23.1	17.5	6.87	16.5
MAX	456	895	940	356	1,370	588	109	172	38	60	10	62
MIN	15	61	74	40	39	101	27	27	11	8.6	5.5	6.3
CFSM	.42	1.59	1.80	.58	3.14	1.86	.36	.45	.16	.12	.05	.11
IN.	.48	1.77	2.08	.66	3.27	2.14	.40	.52	.18	.14	.05	.13

CAL YR 1970 TOTAL 57,967

MEAN 159

MAX 1,440

MIN 12

CFSM 1.09

IN 14.77

WTR YR 1971 TOTAL 46,432.3

MEAN 127

MAX 1,370

MIN 5.5

CFSM .97

IN 11.83

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-21	0200	10.94	1,100	2-23	1900	11.54	1,450

MUSKINGUM RIVER BASIN

39

03117000 Tuscarawas River at Massillon, Ohio

LOCATION.--Lat 40°46'13", long 81°31'27", in sec. 20, T.10N., R.9W., Stark County, on left bank at sewage-treatment works, 0.7 mile south of Massillon, and 3 miles downstream from Newman Creek.

DRAINAGE AREA.--518 sq mi.

PERIOD OF RECORD.--October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 408 cfs.

EXTREMES.--Current year: Maximum discharge, 3,920 cfs Feb. 22 (gage height, 8.95 ft); minimum, 71 cfs Sept. 13.

Period of record: Maximum discharge, 10,700 cfs July 5, 1969 (gage height, 16.43 ft); minimum, 54 cfs July 25, 1954, Aug. 20, 1962, Oct. 13, 1963.

REMARKS.--Records good. Diversion from basin and regulation at Portage Lakes (including Nimisila Reservoir since 1939). See REMARKS for station 03116000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	301	1,180	288	170	1,500	382	187	164	155	124	97
2	171	296	808	278	136	984	392	188	170	136	127	95
3	175	1,460	576	270	123	705	400	199	190	126	132	100
4	164	1,670	984	435	124	561	359	197	192	112	140	97
5	156	1,560	1,000	1,010	874	539	327	195	197	109	135	85
6	158	1,160	658	698	1,380	584	315	443	211	116	130	86
7	156	690	458	426	1,280	1,120	304	534	203	124	123	92
8	161	472	384	331	799	1,220	286	571	203	129	114	127
9	162	396	364	293	435	832	276	533	199	120	107	112
10	167	364	354	280	395	699	265	379	177	128	114	94
11	185	341	396	278	332	631	247	320	165	343	121	83
12	183	324	1,180	275	364	641	246	390	151	350	118	74
13	945	287	2,020	265	478	1,200	266	507	154	205	109	183
14	1,040	242	2,190	393	442	1,520	323	344	171	146	111	388
15	625	989	1,850	469	401	1,520	314	312	168	139	99	255
16	385	1,370	1,340	311	352	1,536	283	272	160	177	95	179
17	286	1,140	1,080	283	367	1,360	268	301	160	175	103	150
18	233	673	986	275	808	972	262	289	151	140	108	127
19	206	462	765	263	1,600	753	248	255	147	155	105	117
20	197	418	626	253	2,740	830	234	233	130	203	100	139
21	208	448	515	243	2,990	850	227	221	149	192	98	334
22	278	377	572	238	3,370	970	226	205	180	161	102	204
23	264	331	910	235	3,850	967	210	189	144	146	110	163
24	216	276	737	231	3,490	747	206	193	136	170	108	135
25	189	248	503	234	2,450	640	192	239	132	318	100	125
26	177	228	409	247	2,280	590	188	335	121	202	96	142
27	174	227	379	261	2,110	560	190	294	117	184	302	144
28	168	285	350	230	1,930	525	199	243	121	166	135	150
29	173	438	331	213	-----	518	199	204	221	154	103	154
30	300	1,220	308	219	-----	457	196	181	179	144	95	135
31	376	-----	293	212	-----	405	-----	167	-----	136	96	-----
TOTAL	8,485	18,733	24,506	9,937	36,470	26,928	8,028	9,160	4,963	5,257	3,660	4,366
MEAN	274	624	791	321	1,303	869	268	295	165	170	118	146
MAX	1,080	1,670	2,190	1,010	3,850	1,530	400	571	221	350	302	388
MIN	156	227	293	212	123	405	188	167	117	109	95	74
CAL YR 1970	TOTAL 190,339 MEAN 521 MAX 3,940 MIN 124											
WTR YR 1971	TOTAL 160,493 MEAN 440 MAX 3,850 MIN 74											

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
12-14	0500	6.27	2,220	2-22	1600	8.95	3,920

MUSKINGUM RIVER BASIN

03117500 Sandy Creek at Waynesburg, Ohio

LOCATION.--Lat 40°40'21", long 81°15'36", in sec. 21, T.17N., R.7W., Stark County, on upstream side of left pier of bridge on State Highway 183 in Waynesburg, 300 ft downstream from Little Sandy Creek, and 0.6 mile upstream from Indian Run.

DRAINAGE AREA.--253 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to December 1938 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--33 years, 250 cfs (13.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,900 cfs Feb. 23 (gage height, 7.34 ft); minimum, 6.9 cfs Sept. 12, 13.
Period of record: Maximum discharge, 15,000 cfs Jan. 22, 1959 (gage height, 10.05 ft), from rating curve extended above 4,700 cfs on basis of contracted-opening and flow over road measurement of peak flow; minimum, 6.9 cfs Sept. 12, 13, 1971.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 923: 1939-40. WSP 1555: 1940(M), 1943(M), 1947(M), 1952, 1956(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	812	578	212	110	645	271	100	69	37	37	23
2	68	736	452	201	100	536	286	100	69	37	35	20
3	79	1,010	436	185	100	442	271	110	69	37	35	20
4	72	759	1,030	484	106	352	231	110	98	35	35	19
5	62	620	864	759	719	424	215	110	90	35	35	20
6	54	484	683	494	823	436	201	450	106	33	33	20
7	50	367	512	358	480	1,030	196	491	198	33	33	23
8	49	295	394	320	280	954	187	473	204	33	30	22
9	56	254	355	260	230	739	185	364	117	33	30	23
10	58	295	325	226	200	603	174	265	88	55	30	25
11	92	379	316	220	180	554	163	215	74	174	33	25
12	262	292	807	210	182	582	155	212	71	295	33	20
13	448	283	1,210	193	215	1,700	152	215	77	144	30	40
14	382	286	905	286	231	1,790	171	185	74	82	30	55
15	500	827	699	289	215	1,580	152	158	66	61	25	42
16	308	803	564	201	177	1,270	142	144	63	55	25	35
17	194	606	671	190	190	950	139	182	61	52	25	35
18	155	477	610	170	452	727	150	177	55	47	23	33
19	132	379	512	160	1,180	631	128	136	52	45	23	42
20	118	355	445	144	2,460	634	123	117	47	52	23	42
21	121	473	403	139	2,270	596	120	106	55	50	23	40
22	195	379	484	136	2,340	624	120	96	58	42	23	35
23	192	310	610	139	3,640	564	117	90	50	50	22	35
24	151	254	519	131	2,160	501	112	88	47	61	22	33
25	133	217	418	133	1,190	442	106	96	47	58	20	30
26	124	217	367	150	999	406	104	98	45	52	22	35
27	115	229	322	160	1,010	379	101	93	42	47	23	35
28	106	265	292	150	823	361	100	88	37	42	19	42
29	103	328	259	140	-----	349	110	85	40	40	19	40
30	251	779	240	130	-----	322	110	79	37	40	20	37
31	692	-----	220	130	-----	289	-----	74	-----	40	20	-----
TOTAL	5,396	13,770	16,502	7,100	23,062	21,412	4,792	5,307	2,206	1,897	836	946
MEAN	174	459	532	229	824	691	160	171	73.5	61.2	27.0	31.5
MAX	692	1,010	1,210	759	3,640	1,790	286	491	204	295	37	55
MIN	49	217	220	130	100	289	100	74	37	33	19	19
CFSM	.69	1.81	2.10	.91	3.26	2.73	.63	.68	.29	.24	.11	.12
IN.	.79	2.02	2.43	1.04	3.39	3.15	.70	.78	.32	.28	.12	.14

CAL YR 1970 TOTAL 129,624 MEAN 355 MAX 2,530 MIN 42 CFSM 1.40 IN 19.06
WTR YR 1971 TOTAL 103,226 MEAN 283 MAX 3,640 MIN 19 CFSM 1.12 IN 15.18

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-20	2400	6.32	2,960	3-14	0400	4.83	1,900
2-23	1000	7.34	3,900				

03118000 Middle Branch Muskingum Creek at Canton, Ohio

LOCATION.--Lat 40°50'29", long 81°21'14", in NE 1/4 sec. 27, T.11N., R.8W., Stark County, on right bank at downstream side of bridge on Martindale Road, 2.4 miles upstream from mouth and 0.3 mile northeast of Canton.

DRAINAGE AREA.--43.1 sq mi.

PERIOD OF RECORD.--September 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--30 years, 31.0 cfs.

EXTREMES.--Current year: Maximum discharge, 692 cfs Feb. 23 (gage height, 5.15 ft); minimum, 2.0 cfs June 18.

Period of record: Maximum discharge, 2,470 cfs Jan. 22, 1959 (gage height, 6.50 ft), from rating curve extended above 1,600 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.2 cfs Nov. 9, 1944, Sept. 19, 1962.

REMARKS.--Records good. Part of municipal water supply for city of Canton is pumped from its northeast well field; a large portion of pumpage is believed to be derived indirectly from creek as recharge for aquifer supplying well field. Mean pumpage for water year 1971, 11.6 cfs. At times low flow regulated by small pools above station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1033: 1942(N), 1943(P), 1944(N). WSP 1305: 1946(N). WSP 1143: 1948. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	44	66	27	13	73	30	14	6.7	4.4	4.	3.6
2	12	31	46	19	13	61	37	15	6.8	4.4	3.8	3.4
3	13	79	40	19	13	46	33	15	6.8	3.7	4.	3.4
4	11	57	47	49	14	38	29	14	10	3.	4.5	3.4
5	9.2	36	64	81	264	51	26	13	13	3.0	4.5	3.0
6	8.8	27	41	52	469	49	25	39	11	3.1	4.0	2.7
7	6.4	23	31	36	145	202	24	32	6.4	3.0	3.6	3.0
8	8.4	20	27	22	43	112	22	34	6.4	3.6	3.6	3.4
9	6.0	18	27	19	36	66	21	28	7.9	5.6	3.2	3.0
10	6.4	20	27	18	34	53	19	19	8.0	6.7	2.7	3.2
11	11	23	30	18	29	51	19	21	7.1	25	3.4	3.2
12	10	22	114	18	28	57	19	28	6.6	20	4.0	3.2
13	72	27	241	19	43	162	19	30	6.3	8.1	3.2	15
14	94	29	110	49	37	141	25	21	6.6	5.3	2.9	10
15	65	143	58	34	33	128	22	19	6.3	4.3	2.7	6.0
16	41	151	45	22	26	166	20	16	6.1	5.0	2.7	4.0
17	27	59	58	20	32	72	20	18	5.4	4.5	2.4	3.5
18	21	41	55	19	131	56	21	16	4.2	4.0	2.4	3.3
19	18	34	46	17	349	57	18	14	4.7	3.8	2.6	3.5
20	16	32	40	16	512	63	17	12	4.9	14	3.0	3.7
21	16	41	34	16	322	60	17	11	4.4	8.8	3.4	3.7
22	18	34	42	16	337	89	16	9.6	4.6	5.0	3.8	3.4
23	18	27	59	16	603	66	16	9.0	4.6	4.8	3.8	3.3
24	16	26	45	15	218	52	15	9.1	4.3	5.6	3.2	3.2
25	15	26	33	16	107	48	14	12	4.3	6.4	3.2	3.1
26	13	22	27	17	145	45	14	12	4.2	5.4	3.4	3.5
27	13	19	26	18	174	43	13	9.3	4.2	6.4	9.2	4.1
28	13	23	26	17	112	41	14	8.9	4.1	5.0	8.4	3.3
29	13	37	23	15	-----	34	14	8.6	4.5	4.5	5.3	3.5
30	26	136	27	15	-----	33	14	7.9	5.3	4.5	4.0	3.6
31	55	-----	21	14	-----	30	-----	6.8	-----	4.8	3.4	-----
TOTAL	691.6	1,306	1,625	742	4,284	2,190	613	522.2	200.5	196.7	114.3	122.2
MEAN	22.3	43.5	52.4	23.9	153	70.6	20.4	16.8	6.68	6.35	3.82	4.07
MAX	94	151	241	41	603	202	37	39	16	25	9.2	15
MIN	6.0	18	21	14	13	30	13	6.8	4.1	3.0	2.4	2.7
CAL YR 1970	TOTAL 13,748.7	MEAN 37.7	MAX 428	MIN 5.3								
WTM YR 1971	TOTAL 12,611.5	MEAN 34.6	MAX 603	MIN 2.4								

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-6	1300	4.88	598	2-23	0500	5.15	692
2-20	1500	4.76	557				

MUSKINGUM RIVER BASIN

03118500 Nimishillen Creek at North Industry, Ohio

LOCATION.--Lat 40°44'03", long 81°21'08", in sec. 35, T.10N., R.8W., Stark County, on left bank just downstream from railroad bridge, 1 mile southeast of North Industry, and 3 miles downstream from Sherrick Run.

DRAINAGE AREA.--175 sq. mi.

PERIOD OF RECORD.--October 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 970.77 ft above mean sea level, adjustment of 1912. Prior to Dec. 13, 1923, nonrecording gage at site 1 mile upstream at different datum.

AVERAGE DISCHARGE.--50 years, 167 cfs.

EXTREMES.--Current year: Maximum discharge, 3,210 cfs Feb. 22 (gage height, 6.42 ft); minimum, 52 cfs Sept. 11.
Period of record: Maximum discharge, 8,600 cfs Jan. 21, 1959 (gage height, 11.29 ft), from rating curve extended above 6,500 cfs on basis of slope-area measurement of peak flow; minimum, 3.6 cfs Sept. 2, 1934.

REMARKS.--Records good. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1971 water year 17.3 cfs. See REMARKS for station 03124500. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1113: 1924-30, 1932-37, 1938(M), 1939-40, 1943(M), 1945(P). WSP 1555: 1929, 1935, 1937(M), 1940(M), 1950(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	255	400	142	100	318	199	131	100	44	73	103
2	100	235	300	138	100	280	233	134	102	75	81	79
3	160	557	280	135	100	250	208	137	119	72	83	75
4	130	311	631	441	120	220	185	137	150	67	88	71
5	110	226	340	398	900	241	182	195	174	67	82	64
6	100	187	241	220	1,400	338	184	411	165	75	83	64
7	95	160	205	166	600	445	184	232	171	77	75	73
8	95	140	190	148	190	426	172	243	111	77	71	71
9	93	138	184	145	135	301	172	168	101	88	77	72
10	113	175	161	140	100	280	149	152	95	80	79	48
11	137	172	217	130	168	271	141	150	98	888	83	64
12	123	158	712	140	193	415	149	232	93	184	80	61
13	596	158	810	150	214	954	168	174	95	138	78	343
14	359	222	470	350	172	588	183	148	95	94	73	230
15	596	700	301	270	175	583	163	137	94	89	68	104
16	264	750	280	170	158	457	159	148	92	125	75	83
17	176	450	350	150	252	340	169	150	91	84	77	80
18	141	300	301	130	526	290	157	136	90	70	78	74
19	133	250	259	130	1,290	304	157	130	89	117	78	80
20	127	230	226	120	1,940	329	158	125	82	112	78	87
21	150	280	211	120	847	332	159	121	91	94	78	87
22	153	230	308	120	1,920	398	156	115	91	86	73	78
23	137	190	336	120	1,900	326	153	113	90	84	74	77
24	123	190	262	110	645	281	149	123	89	111	71	74
25	112	180	205	120	449	260	138	164	89	85	74	70
26	113	150	164	130	552	252	143	114	80	87	73	97
27	112	140	161	130	670	241	145	108	83	91	373	76
28	109	160	178	120	418	234	148	107	90	85	102	82
29	131	250	175	110	-----	227	144	100	215	86	76	83
30	325	700	166	110	-----	214	142	93	89	87	77	81
31	266	-----	158	100	-----	200	-----	93	-----	78	74	-----
TOTAL	5,379	8,246	9,222	5,103	16,269	10,995	4,959	4,720	3,178	3,417	2,707	2,766
MEAN	180	275	297	165	581	355	165	152	106	110	87.3	92.2
MAX	596	750	810	441	1,940	954	233	411	215	688	373	343
MIN	93	138	158	100	100	200	132	93	82	67	68	61

CAL YR 1970 TOTAL 87,382 MEAN 239 MAX 2,220 MIN 84
WTR YR 1971 TOTAL 77,161 MEAN 211 MAX 1,940 MIN 61

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-6	unknown	4.61	1,730	2-22	2330	6.42	3,210
2-20	0200	5.19	2,150	7-11	1400	5.16	2,130

43

LOCATION.--Lat 40°29'13", long 81°11'48", in E 1/2 sec. 36, T.13N., R.6W., Carroll County, on left bank at outlet of Leesville Dam, 1.3 miles upstream from mouth, and 1.4 miles northeast of Leesville.

PERIOD OF RECORD.--October 1938 to current year. Published as McGuire Creek near Leesville 1938-39.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 915.00 ft above mean sea level. Prior to May 27, 1942, nonrecording gage at site 100 ft upstream at present datum.

AVERAGE DISCHARGE.--33 years, 50.9 cfs.

EXTREMES.—Current year: Maximum discharge, 278 cfs Feb. 9, Mar. 17 (gage height, 4.72 ft); minimum daily, 1.3 cfs Sept. 26.
Period of record: Maximum discharge, 348 cfs Sept. 1, 1937.

Period of record: Maximum discharge, 740 cfs Mar. 4, 1940; maximum gage height, 7.88 ft Mar. 4, 1940 (backwater from Conotton Creek); no flow several days during 1939-41.

REMARKS.--Records good. Flow regulated by Leesville Reservoir (see station 03120000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DAY	CCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	98	171	33	27	198	6.4	12	14	6.1	7.0	1.7
2	9.9	102	169	33	16	169	2.0	13	14	6.6	6.6	1.6
3	10	114	169	33	7.0	171	1.9	14	13	6.1	6.6	2.0
4	9.4	115	169	70	4.7	208	2.2	13	17	5.3	6.8	2.0
5	8.8	168	159	112	42	215	2.6	13	29	4.9	6.6	2.8
6	8.3	191	167	142	54	215	3.3	118	40	4.3	6.1	2.7
7	8.0	169	166	157	11	159	4.3	217	81	3.9	5.6	2.8
8	7.6	126	164	132	78	117	5.5	133	81	3.4	4.9	2.8
9	7.2	70	162	64	220	117	6.3	114	74	3.1	4.5	2.7
10	7.0	68	92	47	236	117	7.2	183	65	3.9	4.0	2.7
11	41	69	9.9	46	59	117	7.6	265	53	6.5	3.6	2.7
12	68	66	8.3	46	1.6	178	8.5	265	45	16	3.2	2.7
13	66	92	8.3	46	1.6	196	9.6	261	43	12	2.8	2.5
14	61	94	32	59	1.6	224	14	260	43	9.6	2.5	1.9
15	54	87	99	87	1.6	225	15	257	36	8.5	2.1	1.8
16	43	117	144	68	1.6	208	15	247	29	8.8	1.7	1.9
17	34	159	164	35	1.6	222	17	113	21	8.3	2.0	2.2
18	25	172	164	29	1.6	217	19	70	16	7.8	2.0	2.2
19	18	178	162	29	1.7	220	17	62	14	8.5	2.1	2.2
20	16	186	160	29	1.9	217	16	53	13	9.6	2.2	2.5
21	22	184	160	28	1.9	151	16	45	11	9.4	2.4	2.2
22	29	183	159	28	2.0	41	15	36	9.9	8.5	2.5	1.7
23	26	181	157	28	28	29	15	29	9.4	8.0	2.4	1.6
24	23	179	88	28	88	47	14	23	8.5	8.5	2.0	1.6
25	20	178	14	27	98	56	13	29	8.0	10	2.0	1.4
26	18	178	35	28	159	78	12	29	7.8	9.9	2.4	1.3
27	16	176	60	28	215	96	12	24	7.6	9.4	2.4	1.5
28	15	174	77	28	200	96	14	20	7.0	8.5	2.2	1.6
29	14	172	85	27	-----	49	14	18	6.6	8.5	2.0	1.6
30	38	172	56	28	-----	14	13	16	6.5	8.0	1.9	2.2
31	78	-----	33	28	-----	14	-----	16	-----	7.6	1.7	-----
TOTAL	812.2	4,218	3,473.5	1,603	1,561.4	4,381	318.4	2,967	823.3	239.5	106.8	63.8
MEAN	26.2	141	112	51.7	55.8	141	10.6	95.7	27.4	7.73	3.45	2.13
MAX	78	191	171	157	236	225	19	265	81	16	7.0	2.8
MIN	7.0	66	8.3	27	1.6	14	1.9	12	6.5	3.1	1.7	1.3
CAL YR 1970	TOTAL	23,128.9	MEAN	63.4	MAX	287	MIN	1.6				
WTR YR 1971	TOTAL	20,567.9	MEAN	56.4	MAX	265	MIN	1.3				

LOCATION.--Lat 40°31'31", long 81°17'18", in SE 1/4 sec. 28, T.15N., R.7W., Tuscarawas County, on left bank 500 ft downstream from Atwood Dam, 0.5 mile upstream from mouth, and 1.5 miles southeast of New Cumberland.

PERIOD OF RECORD.--October 1938 to current year. Published as Indian Fork near New Cumberland prior to 1940.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 884.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 28, 1943, nonrecording gage at site 250 ft upstream at same datum.

AVERAGE DISCHARGE.-- 33 years, 69.7 cfs.

EXTREMES.--Current year: Maximum discharge, 579 cfs Mar. 17; maximum gage height, 12.47 ft May 8 (backwater from Conotton Creek); minimum daily discharge, 1.7 cfs Sept. 4, 5.

Period of record: Maximum discharge, 1,610 cfs Apr. 7, 1945; maximum gage height, 21.23 ft July 12, 1969 (from floodmark in gage house), backwater from Dover Reservoir; minimum daily discharge, 0.10 cfs several days in several years.

REMARKS.--Records good. Flow completely regulated by Atwood Reservoir (see station 03121000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	172	233	3.8	9.2	305	73	14	13	7.6	9.3	2.1
2	47	227	271	3.7	9.2	132	72	15	13	8.0	8.7	1.9
3	44	232	257	3.7	9.2	137	69	16	18	7.2	8.6	1.9
4	34	239	270	108	33	130	66	14	20	6.8	9.0	1.7
5	27	303	273	216	124	85	63	15	30	6.2	8.7	1.7
6	17	336	267	240	108	83	57	87	45	5.6	8.2	1.9
7	14	149	310	240	6.0	94	61	119	100	5.4	7.6	3.1
8	14	85	346	159	149	189	47	122	109	5.0	7.2	3.0
9	13	80	344	40	296	322	38	123	105	5.0	6.6	2.9
10	12	82	342	40	165	364	39	251	93	4.8	6.3	2.6
11	39	86	348	69	7.6	353	34	357	84	8.4	6.2	2.4
12	70	86	256	91	35	188	30	354	74	19	5.7	2.4
13	79	112	81	91	63	104	29	348	70	14	5.4	3.6
14	82	155	56	91	63	122	31	308	65	13	5.0	4.8
15	82	149	101	93	63	297	27	229	57	12	4.7	4.8
16	78	159	209	91	21	424	26	76	46	12	4.2	5.2
17	72	160	314	91	2.1	490	26	73	35	11	3.9	5.6
18	66	197	342	34	2.3	506	28	68	26	11	3.6	5.6
19	61	240	341	7.3	2.9	457	26	63	15	10	3.4	6.1
20	54	124	340	7.3	2.9	358	22	58	13	10	3.4	6.3
21	53	86	351	26	2.9	344	19	50	12	9.8	3.3	6.5
22	53	86	373	36	2.9	156	16	42	12	9.2	3.5	6.2
23	50	85	369	36	14	74	14	33	11	9.3	3.3	5.8
24	46	84	369	36	86	82	13	27	10	11	2.9	5.7
25	43	80	369	36	104	86	13	25	9.9	12	2.7	5.6
26	37	78	367	36	238	88	14	29	9.6	11	2.7	5.7
27	34	74	365	36	364	88	14	26	9.3	10	2.7	5.8
28	27	74	363	26	359	86	14	25	9.0	10	2.4	5.8
29	26	74	361	13	-----	85	14	19	8.3	10	2.4	5.7
30	49	85	335	9.2	-----	82	15	18	7.9	10	2.1	5.8
31	75	-----	110	9.2	-----	79	-----	14	-----	9.8	1.9	-----
TOTAL	1,451	4,179	9,033	2,019.2	2,342.2	6,390	1,010	3,018	1,130.0	294.1	155.6	120.2
MEAN	46.8	139	291	65.1	83.7	206	33.7	97.4	37.7	9.49	5.02	4.27
MAX	82	336	373	240	364	506	73	357	109	19	9.3	6.5
MIN	12	74	56	3.7	2.1	74	13	14	7.9	4.8	1.9	1.7

CAL YR 1970	TOTAL 41,693.04	MEAN 114	MAX 542	MIN .64
WTR YR 1971	TOTAL 31,150.3	MEAN 85.3	MAX 506	MIN 1.7

03122500 Tuscarawas River below Dover Dam, near Dover, Ohio

LOCATION.—Lat 40°31'47", long 81°25'48", in T.9 N., R.2 W., Tuscarawas County, on left bank at downstream side of bridge on State Highway 416, 2.2 miles downstream from Dover Dam, 1.5 miles east of Dover, and 3.4 miles upstream from Sugar Creek.

DRAINAGE AREA.—1,405 sq mi.

PERIOD OF RECORD.—October 1923 to current year. Published as Tuscarawas River near Dover 1923-39.

GAGE.—Water-stage recorder. Datum of gage is 861.51 ft above mean sea level, adjustment of 1912. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.—48 years, 1,347 cfs.

EXTREMES.—Current year: Maximum discharge, 6,230 cfs Feb. 6 (gage height, 7.41 ft); maximum gage height, 9.96 ft Feb. 6 (backwater from ice); minimum daily discharge, 242 cfs Aug. 17.

Period of record: Maximum discharge, 26,400 cfs Jan. 26, 1937 (gage height, 15.51 ft); minimum daily, 6.5 cfs Oct. 26, 1948. Flood in March 1913 reached a stage of about 23.5 ft (discharge, 62,000 cfs, computed by Corps of Engineers).

REMARKS.—Records good. Diversion from basin at Portage Lakes (see REMARKS for stations 03116000 and 03117000). Records include diversion from Sugar Creek well field. Mean pumpage for the 1971 water year, 17.3 cfs. See REMARKS for station 03124500. Flow regulated by four flood-control reservoirs since 1936 at points 2.2 to 25 miles upstream (see stations 03119500, 03120000, 03121000, and 03122000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 803: 1933(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	629	2,170	3,340	1,100	650	5,470	1,320	649	486	513	338	299
2	597	2,270	3,000	972	600	5,390	1,320	629	493	468	315	292
3	694	3,090	2,310	916	550	5,190	1,400	636	506	442	318	274
4	629	3,890	3,060	1,450	550	5,270	1,210	655	551	402	357	275
5	564	3,830	3,700	3,250	600	5,180	1,110	642	655	362	376	267
6	545	3,330	3,200	3,070	3,500	4,760	1,070	1,250	707	346	366	252
7	519	2,530	2,430	2,120	4,470	5,030	1,050	2,620	895	354	341	265
8	512	1,710	2,090	1,690	4,080	5,440	1,010	3,700	916	364	310	283
9	512	1,380	1,880	1,350	2,130	5,300	986	3,600	860	379	285	317
10	525	1,260	1,800	1,150	1,620	4,970	930	2,260	734	372	285	299
11	642	1,380	1,640	1,090	1,150	3,490	881	2,450	662	767	304	280
12	965	1,350	2,400	1,100	965	4,270	853	1,880	623	1,690	302	248
13	1,400	1,210	3,930	1,040	1,220	5,140	860	1,940	603	1,010	285	371
14	2,170	1,260	4,080	1,260	1,240	5,430	944	1,790	629	605	279	960
15	1,850	2,130	4,390	1,680	1,120	5,410	986	1,530	655	452	263	693
16	1,590	3,610	4,110	1,330	1,010	5,430	902	1,230	590	435	249	470
17	1,040	3,700	3,890	1,080	909	5,440	881	1,140	545	452	242	380
18	839	2,860	3,420	1,000	1,650	5,030	874	1,060	513	400	260	352
19	720	2,250	3,000	950	3,450	4,080	846	916	476	351	265	351
20	668	1,950	2,580	900	4,700	3,380	804	804	441	438	279	374
21	655	1,940	2,260	850	4,980	3,200	776	727	420	471	279	435
22	755	1,890	2,260	800	4,280	2,730	769	655	484	431	300	552
23	888	1,630	2,980	800	4,500	3,090	748	590	503	371	274	418
24	776	1,430	3,180	755	5,350	2,450	734	551	455	399	279	369
25	688	1,250	2,590	734	5,570	2,150	694	636	450	527	282	335
26	642	1,170	2,090	874	5,510	1,980	655	720	431	593	285	337
27	616	1,150	1,880	900	5,540	1,870	649	769	404	485	673	391
28	597	1,230	1,760	800	5,480	1,800	681	668	396	435	561	367
29	577	1,410	1,640	750	-----	1,750	675	610	575	400	315	402
30	874	2,560	1,460	700	-----	1,590	655	551	612	371	252	373
31	1,650	-----	1,280	700	-----	1,410	-----	512	-----	364	271	-----
TOTAL	26,328	62,820	83,630	37,161	77,374	123,120	27,273	38,370	17,270	15,449	9,790	11,281
MEAN	849	2,094	2,698	1,199	2,763	3,972	909	1,238	576	498	316	376
MAX	2,170	3,890	4,390	3,250	5,570	5,470	1,400	3,700	916	1,690	673	960
MIN	512	1,150	1,280	700	550	1,410	649	512	396	346	242	248

CAL YR 1970 TOTAL 631,258 MEAN 1,729 MAX 5,570 MIN 448
WTR YR 1971 TOTAL 529,866 MEAN 1,452 MAX 5,570 MIN 242

MUSKINGUM RIVER BASIN

03123000 Sugar Creek above Beach City Dam, at Beach City, Ohio

LOCATION.--Lat 40°39'24", long 81°34'37", in NE 1/4 sec.35, T.11 N., R.10 W., Stark County, on right bank at downstream side of 3rd Avenue bridge at Beach City, 2.3 miles upstream from Beach City Dam.

DRAINAGE AREA.--160 sq mi.

PERIOD OF RECORD.--October 1864 to current year. Prior to May 1945 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 953.20 ft above mean sea level, adjustment of 1912. Water-stage recorder for Beach City Reservoir (station 03123500) used as auxiliary gage for this station.

AVERAGE DISCHARGE.--27 years, 132 cfs (11.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,870 cfs Feb. 21; maximum gage height, 9.89 ft Feb. 24 (backwater from Beach City Reservoir); minimum daily discharge, 6.9 cfs Aug. 19.

Period of record: Maximum daily discharge, 7,960 cfs Jan. 22, 1959; maximum gage height, 23.76 ft July 6, 1969 (backwater from Beach City Reservoir); minimum discharge, 1.4 cfs Aug. 27, 1952.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	72	256	78	30	266	95	32	28	15	15	11
2	16	57	168	72	26	231	113	33	26	14	14	10
3	20	376	129	65	24	193	109	38	31	13	13	10
4	21	525	382	192	26	137	91	34	32	12	17	11
5	17	315	353	411	437	155	80	31	27	11	20	13
6	14	146	157	190	860	185	78	333	33	11	15	12
7	14	98	126	140	661	512	76	391	178	12	13	11
8	14	78	101	110	204	530	70	349	70	11	12	10
9	13	67	95	91	112	269	67	254	43	12	11	9.4
10	15	61	91	78	110	238	64	151	34	14	10	8.6
11	19	60	88	73	105	216	56	109	29	84	11	8.0
12	29	55	275	70	104	242	53	107	27	209	13	7.4
13	118	53	610	60	193	938	56	124	31	53	12	18
14	174	53	721	98	250	1,180	68	98	59	29	11	60
15	80	267	370	128	176	811	62	78	36	22	10	30
16	60	428	208	67	124	649	56	68	29	19	8.8	18
17	41	229	256	60	113	450	53	76	24	25	8.0	14
18	33	135	263	57	473	305	59	67	22	18	7.1	13
19	28	107	212	57	836	276	51	58	20	16	6.9	13
20	25	96	181	47	2,740	332	46	51	18	30	8.0	15
21	26	135	144	47	2,580	311	46	46	18	23	12	40
22	39	115	187	48	1,360	330	45	41	21	18	20	30
23	38	92	363	50	1,650	284	44	37	18	15	19	17
24	32	67	318	48	965	216	41	35	16	22	12	13
25	29	59	180	48	386	180	38	45	15	59	10	11
26	26	57	133	58	516	164	35	56	15	36	12	12
27	25	56	120	36	573	151	35	42	15	29	132	14
28	24	66	110	48	518	144	36	37	15	26	38	15
29	24	92	100	36	-----	137	35	34	33	20	17	14
30	44	382	93	36	-----	119	33	33	28	17	14	12
31	88	-----	85	38	-----	99	-----	29	-----	16	12	-----
TOTAL	1,164	4,399	6,985	2,637	16,192	10,250	1,791	2,917	991	911	533.8	480.4
MEAN	37.5	147	225	85.1	578	331	59.7	94.1	33.0	29.4	17.2	16.0
MAX	174	525	721	411	2,740	1,180	113	391	178	209	132	60
MIN	13	53	85	36	24	99	33	29	15	11	6.9	7.4
CFSM	.23	.92	1.41	.53	3.61	2.07	.37	.59	.21	.18	.11	.10
IN.	.27	1.02	1.62	.61	3.76	2.38	.42	.68	.23	.21	.12	.11

CAL YR 1970 TOTAL 59,118.3 MEAN 162 MAX 3,260 MIN 7.0 CFSM 1.01 IN 13.75
WTR YR 1971 TOTAL 49,251.2 MEAN 135 MAX 2,740 MIN 6.9 CFSM .84 IN 11.45

03124000 Sugar Creek below Beach City Dam, near Beach City, Ohio

LOCATION.--Lat 40°38'08", long 81°33'11", in T.10 N., R.3 W., Tuscarawas County, on right bank 1,000 ft downstream from Beach City Dam, 0.4 mile downstream from South Fork, and 1.8 miles southeast of Beach City.

DRAINAGE AREA.--300 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Sugar Creek near Beach City prior to 1940.

GAGE.--Water-stage recorder. Datum of gage is 928.00 ft above mean sea level, adjustment of 1912. Prior to Mar. 23, 1939, nonrecording gage at site 500 ft downstream at datum 1 ft higher. Mar. 23, 1939, to Sept. 26, 1949, water-stage recorder at site 300 ft downstream at present datum.

AVERAGE DISCHARGE.--33 years, 255 cfs.

EXTREMES.--Current year: Maximum discharge, 2,230 cfs Feb. 25 (gage height, 6.97 ft); minimum daily, 8.7 cfs Aug. 19.

Period of record: Maximum discharge, 7,520 cfs July 6, 1969 (gage height, 11.26 ft, from floodmark in well); no flow Oct. 7-30, 1963.

REMARKS.--Records good. Flood flow regulated by Beach City Reservoir (see station 03123500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 953: 1941. WRD Ohio 1969: 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	163	450	176	55	1,730	213	69	64	35	27	28
2	25	124	314	159	40	745	224	68	60	26	24	24
3	28	432	244	142	33	475	232	73	63	23	22	22
4	32	718	524	283	37	327	201	75	69	19	24	23
5	26	536	634	943	280	337	177	69	61	17	32	20
6	21	303	432	716	1,030	386	166	513	64	15	29	19
7	19	201	304	356	848	849	165	1,500	202	15	23	16
8	18	152	240	279	395	1,310	155	1,500	161	15	19	14
9	18	125	210	232	173	782	143	1,350	94	17	17	13
10	19	111	196	207	154	589	132	635	69	19	15	12
11	31	111	184	189	139	521	120	415	56	65	16	11
12	91	103	380	176	129	525	113	345	51	312	19	10
13	109	98	1,040	154	188	1,350	113	335	52	155	18	23
14	229	101	1,180	192	289	1,970	123	291	74	70	14	97
15	154	297	794	280	237	1,880	128	236	71	45	13	81
16	108	607	481	187	167	1,380	114	199	56	36	11	44
17	79	443	497	149	140	976	110	191	48	40	10	30
18	62	287	519	127	356	684	113	182	42	34	9.2	24
19	51	223	441	125	820	570	107	152	39	29	8.7	24
20	45	195	380	105	1,520	613	96	130	36	36	9.6	32
21	46	220	320	98	1,660	594	91	116	34	40	12	38
22	62	226	337	99	1,490	585	91	104	33	34	39	48
23	70	188	693	101	1,740	549	89	95	32	27	51	34
24	62	143	683	98	1,960	454	85	89	29	27	28	24
25	53	113	465	96	2,130	387	79	97	26	55	18	19
26	48	114	349	111	2,100	351	75	120	25	66	14	19
27	44	116	296	98	2,060	323	73	102	25	52	148	21
28	41	123	253	89	1,960	303	74	89	25	42	251	24
29	41	138	222	77	-----	290	76	82	37	35	100	22
30	66	359	187	68	-----	263	71	76	52	30	51	20
31	176	-----	187	70	-----	232	-----	70	-----	29	34	-----
TOTAL	1,904	7,070	13,436	6,182	22,120	22,330	3,749	9,368	1,750	1,460	1,106.5	836
MEAN	61.4	236	433	199	790	720	125	302	58.3	47.1	35.7	27.9
MAX	229	718	1,180	943	2,130	1,970	232	1,500	202	312	251	97
MIN	18	98	184	68	33	232	71	68	25	15	8.7	10

CAL YR 1970 TOTAL 110,377.0 MEAN 302 MAX 2,040 MIN 13
WTR YR 1971 TOTAL 91,311.5 MEAN 250 MAX 2,130 MIN 8.7

MUSKINGUM RIVER BASIN

03124500 Sugar Creek at Strasburg, Ohio

LOCATION.--Lat 40°35'15", long 81°31'24", in NW 1/4 sec.1, T.9 N., R.3 W., Tuscarawas County, on left bank 150 ft upstream from bridge on State Highway 21, 0.8 mile upstream from Broad Run, and 0.1 mile southeast of Strasburg.

DRAINAGE AREA.--311 sq mi.

PERIOD OF RECORD.--August 1931 to March 1933, January 1935 to July 1939, October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft above mean sea level, adjustment of 1912. July 29, 1931, to Mar. 31, 1933, and Dec. 10, 1934, to July 31, 1939, nonrecording gage, and Oct. 1, 1961, to May 26, 1964, water-stage recorder at datum 2.00 ft higher.

AVERAGE DISCHARGE.--14 years (1931-32, 1935-38, 1961-71), 268 cfs.

EXTREMES.--Current year: Maximum discharge, 2,130 cfs Feb. 25 (gage height, 5.03 ft); minimum, 12 cfs Aug. 19, 20.

Period of record: Maximum discharge, 19,700 cfs Aug. 7, 1935 (gage height, 14.70 ft, present datum) from rating curve extended above 8,400 cfs; no flow all or part of each day Sept. 29 to Nov. 6, 1963, Sept. 20, Dec. 3, 4, 1966.

REMARKS.--Records good. Flood flow regulated by Beach City Reservoir 5.0 miles upstream, since August 1937 (see station 03123500). Part of municipal water supply for city of Canton, starting May 1962, is pumped from well field 4.3 miles upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 1971, 17.3 cfs. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1305: 1932-33(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	155	480	175	50	1,810	223	76	84	38	29	34
2	31	119	327	160	44	872	220	76	76	32	27	30
3	31	406	252	142	39	535	220	76	72	29	25	27
4	34	764	510	270	38	346	208	81	74	26	28	27
5	32	590	692	950	237	321	185	77	68	23	34	25
6	27	318	470	800	1,020	410	173	500	75	21	29	22
7	24	207	318	380	920	875	170	1,450	200	20	26	19
8	24	151	249	290	410	1,400	161	1,470	165	20	22	17
9	23	123	216	249	175	896	151	1,340	102	20	20	16
10	23	108	195	219	160	662	140	710	76	21	18	15
11	31	106	183	192	149	585	131	442	63	65	18	14
12	77	100	362	175	132	585	122	354	57	320	19	13
13	93	93	1,050	155	200	1,350	120	338	55	168	21	30
14	219	95	1,240	178	300	1,990	120	297	85	81	18	87
15	151	270	884	282	238	1,960	120	246	80	52	17	90
16	105	650	530	198	173	1,550	120	210	65	41	15	54
17	75	495	515	144	145	1,130	110	195	53	41	14	38
18	59	306	560	120	300	806	113	190	48	40	13	32
19	49	234	470	109	812	662	115	163	43	34	12	32
20	43	195	398	104	1,520	704	105	147	41	34	12	36
21	40	216	327	97	1,670	686	99	136	39	41	14	41
22	55	228	327	95	1,640	662	97	127	38	36	27	54
23	70	192	710	97	1,750	630	97	117	38	29	48	42
24	55	144	752	95	1,880	520	96	110	35	28	30	32
25	49	108	515	90	2,100	426	90	115	33	50	21	27
26	44	106	370	104	2,100	358	84	136	32	65	16	26
27	39	108	306	97	2,070	330	81	127	31	50	115	27
28	38	113	267	81	1,970	312	80	112	30	41	240	29
29	36	127	228	72	-----	297	81	104	42	35	108	29
30	52	330	192	66	-----	270	80	97	60	31	60	26
31	153	-----	183	57	-----	240	-----	91	-----	30	41	-----
TOTAL	1,818	7,157	14,078	6,243	22,242	24,180	3,912	9,710	1,960	1,562	1,139	991
MEAN	58.6	239	454	201	794	780	130	313	65.3	50.4	36.7	33.0
MAX	219	764	1,240	950	2,100	1,990	223	1,470	200	320	240	90
MIN	23	93	183	57	38	240	80	76	30	20	12	13

CAL YR 1970 TOTAL 109,984 MEAN 301 MAX 1,990 MIN 19
WTR YR 1971 TOTAL 94,992 MEAN 260 MAX 2,100 MIN 12

MUSKINGUM RIVER BASIN

49

03125000 Home Creek near New Philadelphia, Ohio

LOCATION.--Lat 40°28'06", long 81°24'10", Tuscarawas County, on right bank 100 ft downstream from highway bridge, 0.5 mile upstream from the mouth, and 1.5 miles southeast of New Philadelphia.

DRAINAGE AREA.--1.64 sq mi.

PERIOD OF RECORD.--December 1936 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 872.49 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.-- 34 years (1937-71), 1.22 cfs (10.11 inches per year).

EXTREMES.--Current year: Maximum discharge, 135 cfs May 6 (gage height, 3.61 ft); no flow several days in July, Aug., Sept.

Period of record: Maximum discharge, 378 cfs July 7, 1969 (gage height, 5.77 ft); no flow at times in 1938-40, 1942-68, 1970-71.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1173: 1941(M). WSP 1385: 1951-53(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	2.0	.87	.60	.14	2.2	.77	.19	.13	.01	0	0
2	.60	3.7	.70	.60	.09	1.7	.96	.23	.14	.01	0	0
3	.35	5.3	1.6	.53	.10	1.2	.73	.25	.19	.01	.06	0
4	.09	2.6	3.0	12	.60	3.4	.60	.19	.13	.01	.06	0
5	.05	2.1	1.7	4.2	7.7	1.7	.53	.40	.11	.01	.03	.01
6	.04	1.7	1.2	2.0	3.9	4.2	.53	45	.20	.01	.01	.20
7	.04	1.5	.91	1.1	1.7	13	.50	7.7	.19	.01	0	.08
8	.03	1.4	.80	.80	.60	4.3	.48	8.2	.11	.01	0	.01
9	.03	1.3	.77	.80	.55	4.2	.45	3.9	.08	0	0	.01
10	.10	2.1	.63	.80	.48	2.7	.35	2.4	.06	.01	0	0
11	1.4	1.7	2.0	.77	.40	3.1	.33	1.8	.06	.48	0	0
12	.48	1.3	.80	.67	.50	3.4	.35	1.8	.09	.23	0	0
13	.96	.60	4.7	.70	1.0	9.6	.40	1.4	.19	.03	0	1.6
14	.56	2.7	2.6	1.8	.70	5.1	.48	1.1	.22	.01	0	.59
15	.53	7.0	1.7	.96	.50	4.3	.35	.91	.11	.01	0	.07
16	.33	2.4	3.1	.77	.45	3.0	.33	.91	.09	.01	0	.36
17	.23	1.5	3.4	.63	4.3	2.1	.40	.87	.07	0	0	.18
18	.19	1.2	2.1	.48	5.4	1.6	.33	.67	.05	0	.02	.06
19	.16	.91	1.8	.35	12	1.8	.25	.56	.05	.17	0	.13
20	.19	2.0	1.4	.33	14	1.8	.25	.50	.05	.05	.08	.07
21	.91	1.4	1.2	.38	4.3	1.7	.26	.40	.04	.02	.27	.03
22	.70	1.1	6.0	.40	23	1.6	.28	.33	.04	.03	.18	.02
23	.48	.80	3.6	.42	14	1.5	.25	.30	.04	.04	.01	.01
24	.48	.60	2.2	.45	4.7	1.3	.23	.30	.03	.63	.01	.01
25	.45	.70	1.6	.40	3.9	1.5	.20	.56	.03	.16	.16	.01
26	.40	.56	1.4	.35	4.0	1.1	.22	.35	.03	.04	.04	.05
27	.35	.63	1.2	.30	5.1	1.0	.19	.30	.03	.02	.02	.03
28	.30	.57	.92	.26	3.0	1.0	.33	.26	.02	.01	.01	.03
29	.43	1.1	.84	.24	-----	.87	.22	.25	.01	.02	.01	.02
30	5.1	1.1	.73	.20	-----	.80	.20	.19	.01	.01	.01	.01
31	3.6	-----	.63	.17	-----	.70	-----	.16	-----	.02	.01	-----
TOTAL	19.60	53.67	63.30	34.46	117.11	87.47	11.75	82.38	2.60	2.13	1.04	3.59
MEAN	.63	1.79	2.04	1.11	4.18	2.82	.39	2.66	.087	.069	.024	.12
MAX	9.1	7.0	8.0	12	23	13	.96	45	.22	.63	.27	1.6
MIN	.03	.56	.63	.17	.09	.70	.19	.16	.01	0	0	0
CFSM	.38	1.09	1.24	.68	2.55	1.72	.24	1.62	.05	.04	.02	.07
IN.	.44	1.22	1.44	.78	2.66	1.98	.27	1.87	.06	.05	.02	.08

CAL YR 1970 TOTAL 584.28 MEAN 1.60 MAX 48 MIN 0 CFSM .98 IN 13.25
WTR YR 1971 TOTAL 479.10 MEAN 1.31 MAX 45 MIN 0 CFSM .80 IN 10.87

PEAK DISCHARGE (BASE, 50 CFS).--May 6 (0445) 135 cfs (3.61 ft).

MUSKINGUM RIVER BASIN

03126000 Stillwater Creek at Piedmont, Ohio

LOCATION.--Lat 40°11'41", long 81°12'56", in sec. 35, T.10N., R.6W., Harrison County, on left bank 400 ft downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mile northwest of Piedmont.

DRAINAGE AREA.--122 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to February 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft above mean sea level, adjustment of 1912. Prior to Sept. 9, 1949, at site 1,000 ft downstream at datum 1.00 ft higher.

AVERAGE DISCHARGE.--33 years, 129 cfs.

EXTREMES.--Current year: Maximum discharge, 924 cfs May 6 (gage height, 9.15 ft); minimum, 6.4 cfs Aug. 19, 20.

Period of record: Maximum discharge, 1,470 cfs Dec. 4, 1950; maximum gage height, 11.44 ft Mar. 5, 1963; minimum discharge, 0.1 cfs Sept. 4, 1953.

REMARKS.--Records good. Flow regulated by Piedmont Reservoir (see station 03125500). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	213	303	108	40	431	35	38	75	37	18	9.9
2	12	202	291	106	46	437	38	41	72	47	16	9.2
3	12	239	286	104	46	459	35	44	76	35	19	9.2
4	11	256	305	248	59	476	32	42	73	28	27	8.8
5	9.8	256	293	324	212	480	30	44	81	24	31	8.5
6	10	248	285	276	249	474	29	638	117	20	22	8.1
7	9.5	228	278	246	201	422	29	606	124	22	18	21
8	9.5	213	274	237	183	371	27	335	118	20	15	17
9	9.8	163	273	237	232	376	26	229	88	27	13	12
10	10	105	269	177	308	401	26	259	74	36	13	11
11	16	115	236	93	272	457	25	340	67	50	13	13
12	18	105	356	93	75	417	26	369	63	62	12	39
13	14	125	376	99	61	299	27	350	62	43	11	89
14	15	149	358	151	56	290	28	365	66	33	9.5	113
15	18	257	342	154	47	159	27	364	75	27	8.8	91
16	18	230	446	138	41	82	27	375	65	27	8.8	88
17	13	230	516	137	67	72	29	381	58	22	7.8	92
18	12	272	494	131	104	64	31	381	54	18	7.4	85
19	12	265	474	112	156	95	28	347	54	19	6.7	84
20	11	256	371	82	192	115	28	336	48	20	7.1	81
21	19	257	242	81	154	112	29	234	41	17	7.8	76
22	26	247	300	83	315	122	33	125	33	16	10	69
23	18	239	325	84	412	137	34	107	30	15	13	62
24	16	231	300	81	256	143	32	108	26	31	11	54
25	16	228	271	83	255	107	31	114	24	41	9.5	48
26	14	229	258	83	393	143	31	109	22	28	18	48
27	13	231	252	39	457	141	34	103	20	27	14	47
28	12	230	245	25	411	140	39	99	21	21	12	45
29	11	236	152	22	-----	96	38	95	35	19	12	44
30	50	295	98	26	-----	56	38	90	31	20	11	50
31	160	-----	105	25	-----	36	-----	83	-----	19	11	-----
TOTAL	607.6	6,550	9,374	3,885	5,300	7,610	922	7,131	1,813	871	413.4	1,432.7
MEAN	19.6	218	302	125	189	245	30.7	230	60.4	28.1	13.3	47.8
MAX	160	295	516	324	457	480	39	638	124	62	31	113
MIN	9.5	105	98	22	40	36	25	38	20	15	6.7	8.1

CAL YR 1970 TOTAL 48,030.8 MEAN 132 MAX 599 MIN 8.8
 WTR YR 1971 TOTAL 45,909.7 MEAN 126 MAX 638 MIN 6.7

MUSKINGUM RIVER BASIN

51

03127000 Stillwater Creek at Tippecanoe, Ohio

LOCATION.--Lat 40°16'13", long 81°17'26", in NW 1/4 sec. 22, T.12N., R.7W., Harrison County, on left bank at downstream side of highway bridge at Tippecanoe, 0.4 mile downstream from Brushy Fork, 3.6 miles upstream from Weaver Run, 6 miles upstream from Laurel Creek, and 9 miles south of Dennison.

DRAINAGE AREA.--282 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 849.00 ft above mean sea level, adjustment of 1912. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 301 cfs.

EXTREMES.--Current year: Maximum discharge, 2,540 cfs May 7 (gage height, 14.77 ft); minimum, 13 cfs Sept. 11.

Period of record: Maximum discharge, 4,410 cfs Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft Mar. 5, 1963; minimum discharge, 1.0 cfs Oct. 3, 4, 1940.

REMARKS.--Records good. Flow regulated by Clendening Reservoir on Brushy Fork (1.9 miles upstream) and Piedmont Reservoir (16 miles upstream) see stations 03126500 and 03125500. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	486	681	187	54	817	101	55	138	58	28	19
2	21	444	620	176	67	873	109	55	126	74	26	18
3	20	523	583	167	50	879	113	67	132	64	26	16
4	19	589	623	375	59	909	94	70	136	48	31	16
5	18	569	636	893	351	918	84	60	122	38	40	15
6	17	541	605	866	542	948	72	929	155	32	37	14
7	17	468	577	582	492	1,200	68	2,350	186	28	34	17
8	16	411	560	368	437	1,020	65	1,970	182	28	27	25
9	15	351	553	321	440	814	61	1,060	152	28	24	19
10	16	235	546	309	444	915	61	686	122	38	24	16
11	30	267	539	188	382	934	55	774	106	55	34	14
12	35	258	705	183	193	882	52	890	96	114	27	46
13	30	275	1,160	194	156	590	52	898	96	84	22	150
14	28	331	1,150	262	244	563	55	780	145	59	21	276
15	31	572	1,020	326	173	529	58	715	149	43	20	242
16	33	682	984	279	123	452	56	663	122	38	19	195
17	30	631	1,110	253	122	360	53	681	106	34	18	195
18	26	682	1,130	242	286	284	61	650	92	28	17	183
19	26	659	861	236	450	259	57	593	83	24	17	170
20	30	696	593	177	761	307	51	524	75	26	17	166
21	29	577	397	170	760	302	50	455	67	25	18	150
22	48	481	430	172	792	299	53	290	55	22	26	132
23	46	462	779	177	1,580	316	58	241	46	20	28	117
24	40	457	904	173	1,540	309	55	230	41	21	38	101
25	35	463	530	162	873	283	48	245	37	84	36	83
26	33	470	419	160	801	282	48	261	34	54	32	79
27	31	474	373	120	920	295	46	214	31	49	36	79
28	31	475	409	75	866	289	61	197	28	40	32	75
29	32	480	506	72	-----	268	64	183	48	32	26	69
30	76	589	447	72	-----	201	59	172	66	31	23	71
31	314	-----	274	76	-----	130	-----	158	-----	30	21	-----
TOTAL	1,195	14,598	20,764	8,013	13,958	17,427	1,920	17,116	2,974	1,349	825	2,768
MEAN	38.5	487	668	258	499	562	64.0	552	99.1	43.5	26.6	92.3
MAX	314	696	1,160	893	1,580	1,200	113	2,350	186	114	40	276
MIN	15	235	274	72	50	130	46	55	28	20	17	14
CAL YR 1970	TOTAL	118,170	MEAN	324	MAX	2,490	MIN	15				
WTR YR 1971	TOTAL	102,847	MEAN	282	MAX	2,350	MIN	14				

MUSKINGUM RIVER BASIN

03127500 Stillwater Creek at Uhrichville, Ohio

LOCATION.--Lat 40°23'10", long 81°20'50", Tuscarawas County, on left bank at concrete dam of Dennison Water Supply Co., at Uhrichville, 2.2 miles upstream from Little Stillwater Creek.

DRAINAGE AREA.--367 sq mi.

PERIOD OF RECORD.--July 1922 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 839.37 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1936, nonrecording gage at site 1.7 miles upstream at same datum. Auxiliary water-stage recorder below concrete dam at datum 10.00 ft lower.

AVERAGE DISCHARGE.-- 49 years, 418 cfs.

EXTREMES.--Current year: Maximum discharge, 2,830 cfs May 7; maximum gage height, 4.61 ft May 8 (backwater from Tuscarawas River); minimum discharge, 12 cfs Sept. 12 (gage height, 0.11 ft).
Period of record: Maximum discharge, 7,450 cfs Aug. 8, 9, 1935 (gage height, 14.2 ft at former site, 12.8 ft at present site); no flow at times in 1930, 1932, 1936, 1939-40, 1953.
Flood in March 1913 reached a stage of about 17.5 ft at former site, and about 15.5 ft at present site.

REMARKS.--Records good. Flow regulated by Piedmont Reservoir (35 miles upstream) and Clendening Reservoir on Brushy Fork (22 miles upstream) beginning in 1938 (see stations 03125500 and 03126500). Water is diverted from Dennison Water Supply dam 1.7 miles upstream from station for municipal supply of cities of Dennison and Uhrichville; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: Drainage area. WSP 1113: 1923-24, 1926-31, 1932(M), 1933-35.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	564	706	278	100	1,000	150	73	161	76	49	31
2	33	540	679	233	100	1,000	141	70	146	72	43	29
3	31	661	625	212	100	1,040	154	73	137	76	41	29
4	31	706	661	436	99	1,040	145	80	151	61	46	27
5	31	652	697	1,090	325	1,060	132	80	141	52	49	27
6	28	598	661	1,150	697	1,110	123	1,250	137	43	52	25
7	28	532	616	920	643	1,500	115	2,740	181	37	46	29
8	28	452	572	607	572	1,200	111	2,300	208	34	40	34
9	28	390	556	444	428	1,000	103	1,800	197	34	31	34
10	28	298	548	405	476	1,100	95	1,400	161	37	29	27
11	123	261	540	338	460	1,120	95	1,060	132	58	34	18
12	141	272	688	244	366	1,150	87	1,080	115	102	52	16
13	73	256	1,300	239	228	1,210	87	1,230	115	115	37	65
14	53	325	1,470	285	217	1,040	91	1,150	156	83	29	235
15	50	697	1,260	420	250	860	91	1,000	181	61	29	270
16	50	880	1,080	413	228	751	87	900	156	52	25	224
17	47	751	1,110	332	187	598	87	860	124	49	25	191
18	42	733	1,160	318	368	444	84	842	107	43	25	186
19	36	724	1,090	267	697	353	87	770	94	37	23	166
20	36	688	805	256	1,430	383	80	680	83	34	25	156
21	45	679	589	217	1,670	405	84	592	76	37	27	151
22	53	556	508	212	1,810	390	77	460	68	37	43	132
23	73	500	841	212	1,800	390	80	314	55	37	49	120
24	67	476	1,100	212	1,700	390	77	258	46	40	49	107
25	60	460	930	207	1,600	368	73	258	40	61	58	94
26	50	468	661	202	1,400	312	67	283	34	102	61	83
27	45	468	516	158	1,200	332	67	258	31	76	58	83
28	42	476	468	136	1,100	325	70	224	29	68	55	83
29	39	492	524	115	-----	318	84	208	40	58	49	80
30	95	580	589	111	-----	267	77	191	65	52	40	76
31	375	-----	492	99	-----	212	-----	176	-----	49	34	-----
TOTAL	1,900	16,135	24,042	10,768	20,253	22,668	2,901	22,660	3,367	1,773	1,252	2,828
MEAN	61.3	538	776	347	723	731	96.7	731	112	57.2	40.4	94.3
MAX	375	880	1,470	1,150	1,810	1,500	154	2,740	208	115	61	270
MIN	28	256	468	99	99	212	67	70	29	34	23	16
(+)	1.56	1.38	1.35	1.35	1.59	1.45	1.46	1.37	1.50	1.78	1.57	1.45

CAL YR 1970 TOTAL 154,746 MEAN 424 MAX 3,490 MIN 21 (+) 1.48
WTR YR 1971 TOTAL 130,547 MEAN 358 MAX 2,740 MIN 16 (+) 1.48

+ Diversion, in cubic feet per second, for municipal supply of cities of Dennison and Uhrichville, furnished by Dennison Water Supply Company.

53

REVISIONS.--WSP 1907: Drainage area.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	81	276	65	60	145	1.6	1.6	25	16	5.0	2.1
2	7.9	86	276	1.8	21	65	105	1.6	25	14	4.2	2.4
3	7.6	104	276	1.2	1.6	107	276	1.6	27	13	4.8	2.4
4	6.9	151	223	60	1.6	138	65	1.6	25	12	5.0	2.4
5	6.3	204	165	121	63	150	11	1.6	35	12	4.8	2.4
6	6.1	216	226	181	123	232	1.2	69	47	12	3.8	2.4
7	6.0	203	226	223	121	235	1.2	116	53	11	3.3	2.4
8	6.0	188	226	165	184	86	1.2	116	50	10	3.0	2.4
9	6.1	168	226	118	74	29	1.2	116	46	12	2.7	2.4
10	5.7	155	226	118	1.2	44	1.3	195	40	12	2.5	2.4
11	12	138	223	118	1.2	55	1.3	280	34	35	2.6	2.4
12	14	59	226	118	76	176	1.3	360	31	52	2.4	2.4
13	15	98	226	84	302	392	1.3	380	36	44	2.4	2.4
14	19	131	226	39	74	396	1.3	414	47	35	2.2	4.4
15	16	162	226	50	1.4	232	1.4	432	44	33	2.1	5.8
16	12	176	253	58	1.4	126	1.4	423	36	30	1.9	6.4
17	11	251	270	60	1.4	50	1.4	388	29	28	1.8	8.3
18	13	292	253	60	1.4	61	1.4	179	22	26	1.8	8.3
19	11	285	209	60	1.4	232	1.5	23	20	24	1.8	12
20	11	281	84	60	1.4	545	1.5	27	16	13	1.8	13
21	20	279	61	60	1.4	550	1.6	29	15	7.8	1.9	11
22	13	279	61	60	1.5	109	1.6	28	14	5.8	2.1	9.3
23	12	277	61	60	1.5	2.4	1.6	27	13	5.0	2.0	8.3
24	11	275	96	60	1.5	2.8	1.6	28	13	11	1.8	6.8
25	11	275	118	60	1.8	3.7	1.6	39	13	11	1.9	8.8
26	11	280	118	60	80	128	1.6	41	13	8.3	2.2	6.4
27	11	280	118	60	316	486	1.6	36	11	7.3	2.1	7.3
28	12	280	200	60	332	368	1.6	34	11	6.1	2.0	6.1
29	11	280	270	60	-----	31	1.6	30	13	6.4	2.0	5.8
30	25	280	270	60	-----	1.6	1.6	28	13	6.8	1.9	5.8
31	56	-----	232	60	-----	1.6	-----	25	-----	6.4	1.9	-----
TOTAL	393.7	6,214	6,147	2,421.0	1,847.7	5,180.1	494.5	3,871.0	817	525.9	81.7	162.3
MEAN	12.7	207	198	78.1	66.0	167	16.5	125	27.2	17.0	2.64	5.41
MAX	56	292	276	223	332	550	276	432	53	52	5.0	13
MIN	5.7	59	61	1.2	1.2	1.6	1.2	1.6	11	5.0	1.8	2.1
CAL YR 1970	TOTAL	35,468.7	MEAN	97.2	MAX	525	MIN	1.3				
WTK YR 1971	TOTAL	28,155.9	MEAN	77.1	MAX	550	MIN	1.2				

03129000 Tuscarawas River at Newcomerstown, Ohio

LOCATION.--Lat 40°15'41", long 81°36'33", in T.5 N., R.3 W., Tuscarawas County, on right bank 150 ft upstream from highway bridge 0.2 mile south of Newcomerstown, 2 miles upstream from Buckhorn Creek, and 4 miles downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 sq mi.

PERIOD OF RECORD.--September 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft above mean sea level, adjustment of 1912. Prior to Sept. 28, 1925, and July 18, 1935, to Feb. 13, 1939, nonrecording gage. Sept. 28, 1925, to July 17, 1935, water-stage recorder at site 1.5 miles upstream at datum 5.03 ft higher prior to Oct. 1, 1934, and 0.03 ft higher Oct. 1, 1934, to Feb. 13, 1939.

AVERAGE DISCHARGE.--50 years, 2,394 cfs.

EXTREMES.--Current year: Maximum discharge, 10,800 cfs Feb. 23 (gage height, 8.80 ft); minimum, 299 cfs Sept. 13.

Period of record: Maximum discharge, 46,800 cfs Jan. 26, 1937 (gage height, 20.65 ft, site and datum then in use); minimum, 120 cfs Aug. 7, 1930; minimum daily, 170 cfs Aug. 6, 1930.

Flood in March 1913 reached a stage of about 21.5 ft, at site and datum used prior to Oct. 1, 1934 (discharge, 83,000 cfs, computed by Corps of Engineers).

REMARKS.--Records good. Diversion from basin at Portage Lakes (see REMARKS for stations 03116000 and 03117000). Flow regulated by eight flood-control reservoirs at points 40 to 64 miles upstream (see pp. 79, 80). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	856	2,670	4,560	2,420	900	9,200	2,290	980	1,200	704	513	404
2	775	2,900	4,700	1,940	900	8,640	2,160	960	1,210	648	481	425
3	748	3,530	4,070	1,760	900	7,690	2,350	970	1,250	585	473	390
4	775	4,860	4,030	2,530	1,000	7,270	2,270	980	1,270	545	521	362
5	706	5,220	5,080	4,960	2,710	7,340	1,950	1,000	1,270	489	521	348
6	658	4,820	5,210	6,050	5,000	7,180	1,790	4,960	1,450	449	529	334
7	642	4,040	4,450	4,870	3,960	8,530	1,720	7,800	1,520	425	521	369
8	626	3,070	3,740	3,650	5,330	9,140	1,670	8,130	1,720	418	497	348
9	634	2,420	3,390	2,960	4,440	8,870	1,590	8,100	1,560	441	465	348
10	650	2,110	3,200	2,460	2,700	7,920	1,510	6,670	1,350	449	457	376
11	793	2,020	3,070	2,260	2,460	7,040	1,430	4,750	1,160	545	465	341
12	1,210	2,050	3,640	2,100	2,070	6,190	1,370	4,480	1,080	1,670	481	320
13	1,370	1,850	5,960	2,020	2,120	8,000	1,350	4,310	1,010	1,740	473	425
14	2,260	1,880	6,920	2,030	2,360	9,030	1,380	4,270	1,080	1,170	449	1,120
15	2,460	2,690	7,130	2,570	2,080	9,200	1,470	3,820	1,110	830	433	1,320
16	2,110	4,710	6,650	2,620	1,920	8,770	1,420	3,420	1,080	694	418	1,030
17	1,680	5,450	6,350	2,160	1,730	7,990	1,340	3,140	950	675	404	820
18	1,270	4,960	6,110	1,910	2,350	7,330	1,320	3,010	880	630	397	694
19	1,090	4,090	5,630	1,730	4,440	6,290	1,300	2,520	800	577	411	639
20	991	3,630	4,910	1,600	7,910	5,630	1,250	2,200	742	561	425	657
21	973	3,440	4,100	1,600	8,690	5,460	1,200	1,970	685	612	441	621
22	1,000	3,370	3,750	1,540	9,300	4,970	1,170	1,780	657	621	561	723
23	1,090	3,050	4,590	1,540	10,600	4,800	1,150	1,540	685	553	513	713
24	1,120	2,740	5,500	1,490	10,300	4,240	1,110	1,390	648	594	457	585
25	991	2,490	5,310	1,460	10,100	3,680	1,070	1,390	603	657	449	521
26	910	2,350	4,260	1,480	9,910	3,350	1,030	1,480	585	790	529	489
27	847	2,310	3,530	1,560	9,570	3,400	990	1,540	561	770	545	513
28	820	2,320	3,190	1,110	9,620	3,490	1,020	1,470	529	639	1,130	529
29	793	2,440	3,090	900	-----	3,200	1,020	1,360	545	603	800	521
30	982	3,050	3,060	950	-----	2,800	1,010	1,280	732	561	553	553
31	1,870	-----	2,890	950	-----	2,490	-----	1,230	-----	529	433	-----
TOTAL	33,700	96,530	142,070	69,380	135,410	199,130	43,700	92,900	29,902	21,174	15,745	16,838
MEAN	1,087	3,218	4,583	2,238	4,836	6,424	1,457	2,997	997	683	508	561
MAX	2,460	5,450	7,130	6,050	10,600	9,200	2,350	8,130	1,720	1,740	1,130	1,320
MIN	626	1,850	2,890	900	900	2,490	990	960	529	418	397	320

CAL YR 1970 TOTAL 1,035,877 MEAN 2,838 MAX 9,110 MIN 498
 WTR YR 1971 TOTAL 896,479 MEAN 2,456 MAX 10,600 MIN 320

03130000 Black Fork below Charles Mill Dam, near Mifflin, Ohio

LOCATION.--Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23N., R.17W., Ashland County, on left bank 700 ft downstream from Charles Mill Dam, 2.5 miles south of Mifflin, and 4 miles upstream from Rocky Fork.

DRAINAGE AREA.--217 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1940, published as Black Fork near Mifflin. Monthly discharge only for October 1938, published in WS 1305.

GAGE.--Water-stage recorder. Datum of gage is 981.56 ft above mean sea level, adjustment of 1912. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.--33 years, 186 cfs.

EXTREMES.--Current year: Maximum discharge, 1,190 cfs Mar. 2 (gage height, 5.48 ft); minimum daily, 9.5 cfs Aug. 25, 26, Sept. 9, 10. Period of record: Maximum discharge, 2,800 cfs Mar. 13, 1964; maximum gage height, 8.45 ft Mar. 16, 1939; minimum daily discharge, 0.9 cfs Apr. 21, 1940. Flood of March 1913 reached a discharge of 11,700 cfs (computed by Corps of Engineers).

REMARKS.--Records good. Flow regulated by Charles Mill Reservoir (see station 03129500). Water quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	53	350	192	93	1,020	213	48	125	27	28	12
2	38	49	472	186	85	1,110	163	49	111	26	26	11
3	17	52	496	180	48	1,160	99	52	101	22	25	11
4	16	136	496	189	29	1,110	105	48	90	21	24	11
5	15	189	480	198	59	907	111	49	81	18	22	11
6	17	189	484	240	83	664	111	119	74	18	22	11
7	18	171	436	266	126	547	66	314	69	16	19	10
8	18	146	372	266	160	512	41	440	70	16	18	10
9	15	255	318	246	165	480	54	488	64	16	16	9.5
10	18	308	273	216	174	529	58	492	57	16	16	9.5
11	18	198	246	195	168	508	58	476	51	34	20	10
12	20	78	225	186	162	440	60	452	51	48	17	11
13	133	61	228	183	165	480	66	381	48	49	16	18
14	213	62	500	160	168	556	70	332	45	46	15	25
15	228	74	664	177	171	673	70	281	42	38	14	25
16	280	192	655	177	168	795	79	235	39	33	13	23
17	294	266	388	174	168	853	81	208	36	30	11	22
18	283	262	646	171	171	849	82	170	33	26	10	21
19	219	240	813	165	165	804	81	148	31	25	11	16
20	133	143	615	162	259	750	79	132	28	25	11	24
21	100	104	416	157	610	678	77	119	28	22	12	27
22	131	111	432	152	290	633	72	105	26	21	13	26
23	146	186	444	146	646	610	66	90	24	19	13	25
24	174	154	496	141	1,030	570	69	82	23	22	11	23
25	154	91	476	136	1,040	512	60	95	22	26	9.5	21
26	85	70	432	131	1,050	444	58	138	22	33	9.5	21
27	53	69	364	123	1,040	381	52	203	22	37	14	21
28	53	72	308	118	1,030	332	55	230	21	38	15	20
29	55	85	262	113	-----	302	51	213	25	41	14	21
30	58	146	231	106	-----	269	48	180	25	37	13	21
31	52	-----	204	100	-----	235	-----	150	-----	33	13	-----
TOTAL	3,167	4,212	13,222	5,372	9,523	19,713	2,355	6,511	1,484	879	491.0	530.0
MEAN	102	140	427	173	340	636	78.5	210	49.5	28.4	15.8	17.7
MAX	294	308	813	266	1,050	1,160	213	492	125	49	28	27
MIN	15	49	204	100	29	235	41	48	21	16	9.5	9.5
CAL YR 1970	TOTAL 80,910	MEAN 222	MAX 1,180	MIN 11								
WTR YR 1971	TOTAL 67,459.0	MEAN 185	MAX 1,160	MIN 9.5								

03130500 Touby Run at Mansfield, Ohio

LOCATION.--Lat 40°45'53", long 82°32'43", in NW 1/4 sec. 20, T.21N., R.18W., Richland County, on left bank 100 ft downstream from West 4th Street Bridge at west edge of Mansfield, and 2 miles upstream from mouth.

DRAINAGE AREA.--5.44 sq mi.

PERIOD OF RECORD.--August 1946 to current year.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 1,216.42 ft above mean sea level, adjustment of 1912 (levels by city of Mansfield).

AVERAGE DISCHARGE.--25 years, 4.90 cfs (12.2 inches per year).

EXTREMES.--Current year: Maximum discharge, 724 cfs May 6 (gage height, 3.28 ft); minimum 0.34 cfs Sept. 6 (gage height 0.48 ft).

Period of record: Maximum discharge, 905 cfs June 6, 1947 (gage height, 4.17 ft), from rating curve extended above 160 cfs on the basis of slope-area measurements at gage heights 2.49 and 4.17 ft and computation of flow over dam at gage height 3.94 ft; no flow for part of Sept. 4, 1965, Nov. 10, 1967.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	.93	2.9	.80	.56	4.8	6.1	.76	1.8	1.2	.62	.50
2	.76	21	1.8	.76	.54	3.5	9.0	1.2	4.4	.93	.62	.50
3	.76	3.9	5.5	.93	.54	2.5	3.4	1.8	2.5	.62	.93	.50
4	.62	1.5	11	37	5.0	2.0	2.5	.76	1.8	.50	1.5	.50
5	.76	1.2	3.4	11	51	1.8	2.1	1.8	1.8	.50	.93	.41
6	.76	.93	1.8	6.8	3.9	15	2.1	199	2.5	.62	.62	.76
7	.76	.93	1.2	5.2	1.8	20	1.8	23	1.8	.76	.62	.76
8	1.2	.76	.96	4.5	.93	9.0	1.8	32	1.8	.76	.50	.50
9	1.2	.76	.90	4.0	.75	7.2	1.5	14	1.8	1.2	.62	.50
10	1.5	.93	.90	3.6	.66	8.4	1.2	7.8	1.5	.76	9.7	.62
11	.93	.93	3.5	3.4	.66	7.8	1.2	3.9	1.2	19	6.1	.62
12	9.0	1.8	41	3.4	7.0	17	.93	26	3.4	.93	.62	.50
13	10	1.2	12	3.4	3.8	37	3.9	11	1.5	.76	.62	14
14	7.2	9.0	4.4	14	2.0	19	5.0	4.4	1.2	.76	.50	1.5
15	2.5	14	2.9	3.9	1.5	41	1.5	2.9	1.2	.76	.50	.62
16	.93	2.5	3.6	2.1	1.2	18	1.2	5.5	.92	.93	.50	.62
17	.93	1.5	6.1	1.8	20	9.0	2.1	4.4	.76	1.5	.50	.50
18	.93	1.2	3.4	1.5	24	6.1	1.5	2.9	.76	.62	.50	.50
19	.93	1.2	2.5	1.4	47	15	1.2	2.9	.62	1.5	.50	.62
20	3.4	7.8	1.5	1.3	41	12	1.2	5.5	.62	.76	1.2	14
21	5.5	2.5	1.5	1.3	9.0	15	1.5	2.5	.76	.50	4.4	.93
22	1.2	1.5	21	1.3	67	13	1.2	1.8	.62	.50	2.9	.62
23	.93	.93	10	1.2	23	8.4	.93	2.1	.76	.62	.50	.62
24	.93	.76	4.4	1.1	7.8	6.1	.93	2.5	.93	12	.50	.50
25	.93	.62	2.1	.95	16	5.5	.76	24	.93	.76	.50	.50
26	.93	.76	1.8	.80	29	4.4	.76	4.4	1.8	.76	9.0	.76
27	1.2	2.5	1.6	.72	24	3.9	.76	2.5	.62	.62	6.6	.62
28	1.2	6.1	1.4	.66	9.7	3.9	.76	2.1	.62	.62	.62	.93
29	2.5	16	1.2	.62	-----	2.9	.76	2.1	1.5	.76	.50	1.8
30	3.9	7.2	1.0	.66	-----	2.1	.76	2.1	4.4	1.2	.41	.93
31	.93	-----	.90	.58	-----	2.1	-----	1.8	-----	.76	.50	-----
TOTAL	65.98	112.84	158.16	120.62	399.34	323.4	68.35	399.42	46.82	54.47	54.63	47.24
MEAN	2.13	3.76	5.10	3.89	14.3	10.4	2.01	12.9	1.56	1.76	1.76	1.57
MAX	10	21	41	37	67	41	9.0	199	4.4	19	9.7	14
MIN	.62	.62	.90	.58	.54	1.8	.76	.62	.62	.50	.41	.41
CFSM	.39	.69	.94	.72	2.63	1.91	.37	2.37	.29	.32	.32	.29
IN.	.45	.77	1.08	.82	2.73	2.21	.41	2.73	.32	.37	.37	.32

CAL YR 1970 TOTAL 1.056.45 MEAN 5.09 MAX 170 MIN .38 CFSM .94 IN 12.69
 WTR YR 1971 TOTAL 1.843.27 MEAN 5.05 MAX 199 MIN .41 CFSM .93 IN 12.60

PEAK DISCHARGE (BASE, 200 CFS).--May 6 (0300) 724 cfs (3.28 ft).

03131500 Black Fork at Loudonville, Ohio

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R.16 W., Ashland County, on right bank at upstream side of bridge on State Highway 3 at Loudonville, 1.5 miles downstream from Big Run.

DRAINAGE AREA.--349 sq mi.

PERIOD OF RECORD.--May 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 929.16 ft above mean sea level. Prior to Oct. 23, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 326 cfs.

EXTREMES.--Current year: Maximum discharge, 2,640 cfs May 6 (gage height, 9.66 ft); minimum, 69 cfs part of each day Sept. 6-11. Period of record: Maximum discharge, 8,460 cfs July 5, 1969 (gage height, 14.11 ft); from rating curve extended above 4,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 24 cfs Jan. 12, 1964.

REMARKS.--Records good. Flow regulated since 1936 by Charles Mill Reservoir, 16 miles above station (see station 03129500). Records include diversion from Clear Fork Reservoir (see REMARKS for station 03132000). Water-quality records for the current year are published in Par. 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1935, WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	126	400	280	181	1,190	344	150	221	134	110	81
2	133	225	521	269	185	1,210	395	150	216	108	100	79
3	93	256	547	265	152	1,310	263	156	219	100	102	79
4	85	219	674	551	122	1,250	249	156	194	94	102	79
5	83	250	568	500	960	1,060	244	150	182	90	102	77
6	85	256	542	352	304	818	244	1,840	175	88	94	71
7	87	239	489	347	225	952	224	1,000	175	90	90	71
8	89	219	435	337	253	697	177	1,010	168	88	86	75
9	87	247	385	323	246	626	177	768	163	88	83	75
10	87	351	347	300	263	647	182	669	154	98	94	73
11	89	297	341	281	248	675	177	629	147	341	163	75
12	89	175	758	273	260	608	177	855	152	189	104	75
13	312	155	563	269	345	1,050	184	641	147	141	90	100
14	285	150	618	345	278	933	211	524	136	136	88	229
15	318	282	650	290	261	1,040	199	446	136	126	84	108
16	312	262	820	261	253	1,140	199	389	132	120	81	100
17	336	330	559	257	380	1,050	201	359	126	118	83	96
18	324	329	592	247	575	1,000	201	314	124	114	79	92
19	279	308	929	244	788	987	191	275	120	104	79	86
20	211	274	764	239	1,140	990	191	257	116	116	86	163
21	203	240	482	235	783	870	189	236	112	108	86	177
22	193	206	630	235	1,620	905	184	221	114	102	120	108
23	203	230	689	232	1,430	802	177	206	110	98	84	100
24	211	261	641	222	1,290	740	175	194	108	143	79	96
25	216	191	563	217	1,230	672	168	296	106	141	77	92
26	165	159	516	223	1,410	611	161	246	106	112	77	94
27	119	162	456	215	1,450	536	159	266	104	126	260	94
28	119	190	396	207	1,270	485	159	302	98	120	106	94
29	124	241	357	201	-----	446	159	305	108	122	86	96
30	143	467	323	201	-----	407	154	278	106	118	79	108
31	138	-----	298	190	-----	368	-----	244	-----	120	81	-----
TOTAL	5,445	7,297	16,853	8,608	17,902	26,095	6,115	13,532	4,275	3,793	3,035	2,943
MEAN	176	243	544	278	639	842	204	437	143	122	97.9	98.1
MAX	336	467	929	551	1,620	1,310	395	1,840	221	341	260	229
MIN	83	126	298	190	122	368	154	150	98	88	77	71
CAL YR 1970	TOTAL	136,901	MEAN	375	MAX	2,020	MIN	79				
WTR YR 1971	TOTAL	115,893	MEAN	318	MAX	1,840	MIN	71				

MUSKINGUM RIVER BASIN

03132000 Clear Fork at Butler, Ohio

LOCATION.--Lat 40°35'37", long 82°25'20", in NE 1/4 sec.20, T.21 N., R.17 W., Richland County, on left bank at downstream side of bridge on State Highway 95, 0.3 mile northeast of Butler.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--October 1944 to current year. Prior to June 1945 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 1,057.20 ft above mean sea level.

AVERAGE DISCHARGE.--27 years, 138 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 2,370 cfs May 6 (gage height, 6.66 ft); minimum, 21 cfs Sept. 19, 20.

Period of record: Maximum discharge, 14,300 cfs Jan. 21, 1959 (gage height, 9.43 ft), from rating curve extended above 3,000 cfs on basis of computed reservoir inflow; minimum, 12 cfs Sept. 12, 18, 1948.

REMARKS.--Records good. Flow regulated by Clear Fork Reservoir (capacity, 10,740 acre-ft) 16 miles above station since 1949. Water diverted from Clear Fork Reservoir for municipal supply of city of Mansfield since 1953; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1385: 1951-54. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	39	71	72	46	270	102	52	78	44	35	26
2	26	74	57	71	44	208	198	52	75	45	35	25
3	26	106	58	68	38	173	156	53	80	43	34	25
4	26	63	101	304	30	147	132	52	77	40	36	24
5	26	54	75	226	700	132	108	51	71	40	37	25
6	26	48	60	113	175	173	101	1,390	89	40	35	24
7	26	45	52	90	92	489	96	988	86	40	33	24
8	26	42	47	85	75	279	94	972	75	41	32	24
9	26	41	47	80	65	200	84	545	77	42	32	23
10	27	39	45	75	60	178	108	324	64	50	36	23
11	27	37	46	70	60	173	80	222	62	98	52	23
12	28	37	570	65	60	168	72	439	60	77	44	23
13	52	37	336	70	89	554	71	333	60	52	36	25
14	43	37	185	102	75	520	86	234	65	48	33	29
15	41	53	136	88	65	622	81	185	60	44	32	24
16	37	56	117	71	58	604	74	171	54	42	32	24
17	34	45	128	65	187	422	71	309	54	40	32	23
18	33	41	115	60	279	285	71	202	52	39	32	23
19	32	37	108	60	482	270	64	151	49	38	30	22
20	32	39	96	55	860	333	62	130	49	40	32	28
21	47	45	88	55	531	276	60	120	49	39	33	36
22	52	42	196	55	1,160	339	60	104	49	37	30	26
23	43	37	234	55	1,140	273	62	198	47	36	29	24
24	41	32	147	55	590	231	62	190	46	45	28	23
25	38	32	107	50	351	190	71	143	44	46	28	23
26	38	32	96	50	506	173	59	145	44	42	28	23
27	37	33	92	50	580	151	56	119	44	43	64	23
28	37	36	84	50	402	145	54	97	44	39	42	23
29	37	50	81	50	-----	149	60	88	44	37	31	23
30	39	120	75	50	-----	140	56	83	45	36	28	23
31	42	-----	75	48	-----	111	-----	83	-----	36	26	-----
TOTAL	1,071	1,429	3,725	2,458	8,800	8,378	2,511	8,225	1,793	1,379	1,067	734
MEAN	34.5	47.6	120	79.3	314	270	83.7	265	59.8	44.5	34.4	24.5
MAX	52	120	570	304	1,160	622	198	1,390	89	98	64	36
MIN	26	32	45	48	30	111	54	51	44	36	26	22
(+)	16.0	15.2	15.3	16.3	16.9	16.0	15.6	16.1	18.1	17.6	17.4	17.4

CAL YR 1970 TOTAL 47,194 MEAN 129 MAX 2,130 MIN 26 (+) 15.2
WTR YR 1971 TOTAL 41,570 MEAN 114 MAX 1,390 MIN 22 (+) 16.5

+ Diversion, in cubic feet per second, from Clear Fork Reservoir for municipal supply; furnished by city of Mansfield.

MUSKINGUM RIVER BASIN

59

03133500 Clear Fork below Pleasant Hill Dam, near Perrysville, Ohio

LOCATION.--Lat 40°37'13", long 82°19'28", in NE 1/4 sec.7, T.19 N., R.16 W., Ashland County, on right bank 0.2 mile downstream from Pleasant Hill Dam, 2.8 miles south of Perrysville, and 4.7 miles upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Clear Fork near Perrysville prior to 1940. Monthly discharge only for October 1938, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 967.00 ft above mean sea level, adjustment of 1912. Prior to May 1, 1947, water-stage recorder at site 0.5 mile downstream at datum 4.88 ft lower.

AVERAGE DISCHARGE.--33 years, 188 cfs.

EXTREMES.--Current year: Maximum discharge, 1,180 cfs Mar. 1 (gage height, 3.54 ft); minimum daily, 23 cfs Sept. 10-12.
Period of record: Maximum discharge, 2,340 cfs Jan. 23, 1959 (gage height, 4.89 ft); minimum daily, 0.6 cfs Nov. 2, 4, 1938.

REMARKS.--Records good. Flow regulated by Pleasant Hill Reservoir (see station 03133000). See REMARKS for station 03132000 for diversion by city of Mansfield. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	142	251	88	52	984	127	82	104	58	36	30
2	43	116	186	89	44	1,100	156	80	101	55	34	29
3	44	118	167	89	44	955	204	82	104	47	34	27
4	39	118	206	152	44	546	208	81	100	44	35	27
5	36	118	192	251	204	274	147	79	95	41	35	27
6	36	140	156	250	406	274	139	437	95	40	34	27
7	36	152	99	221	401	279	146	656	106	38	33	25
8	37	152	93	143	398	444	147	786	100	36	31	25
9	111	92	93	105	287	538	145	803	91	34	30	24
10	116	64	94	87	107	533	140	781	73	42	34	23
11	114	63	94	87	77	387	134	760	61	102	47	23
12	73	63	136	87	114	311	127	749	65	124	45	23
13	73	115	160	87	77	290	126	973	67	97	41	30
14	69	145	202	88	77	282	131	1,070	67	76	38	40
15	79	162	262	95	77	230	131	998	65	62	35	37
16	122	113	261	99	77	308	126	535	63	56	31	34
17	139	71	297	98	77	530	121	441	60	50	29	31
18	137	92	320	92	184	586	118	383	58	46	27	28
19	72	93	316	71	291	568	111	251	56	43	27	27
20	42	154	312	56	478	566	105	200	55	41	29	34
21	50	163	309	56	485	533	102	190	55	39	31	41
22	54	146	289	56	356	447	100	171	53	37	32	40
23	109	96	287	57	784	448	96	151	51	36	30	37
24	135	73	308	58	988	331	95	138	49	42	27	80
25	135	114	281	58	961	290	96	168	58	48	25	101
26	72	132	155	58	1,060	207	94	188	60	49	25	104
27	43	132	124	58	985	152	89	177	54	48	30	55
28	42	132	105	58	974	152	89	158	51	44	40	34
29	42	132	88	58	-----	154	85	138	70	41	38	35
30	119	235	88	58	-----	160	85	124	60	39	35	35
31	148	-----	88	58	-----	167	-----	114	-----	38	33	-----
TOTAL	2,410	3,638	6,019	2,968	10,109	13,026	3,720	11,944	2,147	1,593	1,031	1,133
MEAN	77.7	121	194	95.7	361	420	124	385	71.6	51.4	33.3	37.8
MAX	148	235	320	251	1,060	1,100	208	1,070	106	124	47	104
MIN	36	63	88	56	44	152	85	79	49	34	25	23
CAL YR 1970	TOTAL 71,612			MEAN 196		MAX 1,050		MIN 24				
WTR YR 1971	TOTAL 59,738			MEAN 164		MAX 1,100		MIN 23				

MUSKINGUM RIVER BASIN

03135000 Lake Fork below Mohicanville Dam, near Mohicanville, Ohio

LOCATION.--Lat 40°43'24", long 82°09'18", in sec.3, T.20 N., R.15 W., Ashland County, on right bank 800 ft downstream from Mohicanville Dam, 2 miles east of Mohicanville, and 2.4 miles downstream from the confluence of Jerome and Muddy Forks.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Published as Lake Fork near Mohicanville prior to 1940.

GAGE.--Water-stage recorder. Datum of gage is 930.00 ft above mean sea level, adjustment of 1912. Prior to July 25, 1949, water-stage recorder at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--33 years, 223 cfs.

EXTREMES.--Current year: Maximum discharge, 1,840 cfs Feb. 20 (gage height, 8.96 ft); minimum daily, 7.1 cfs Sept. 6, 11.

Period of record: Maximum discharge, 5,490 cfs July 5, 1969 (gage height, 14.32 ft); minimum daily discharge, 1 cfs June 10, 1947, Jan. 25, 1959.

REMARKS.--Records good. Flow regulated by Mohicanville Reservoir (see station 03134500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	71	586	102	34	1,440	153	48	57	25	20	8.4
2	30	141	316	94	28	1,420	201	53	62	23	19	8.8
3	44	752	230	86	25	1,030	182	58	66	21	17	8.9
4	29	442	676	464	33	584	149	56	64	19	18	8.9
5	24	240	499	910	350	450	131	53	59	18	20	8.7
6	23	162	288	352	1,100	436	120	339	51	18	17	7.1
7	21	115	184	200	439	881	115	560	73	18	16	14
8	22	89	140	160	250	609	102	648	54	18	15	11
9	23	77	128	140	190	406	96	446	47	17	14	8.4
10	23	70	120	120	170	366	89	258	41	18	14	7.5
11	24	63	152	102	152	330	82	178	38	144	23	7.1
12	24	59	755	92	143	341	78	403	42	111	19	9.8
13	331	62	1,330	78	271	1,080	80	355	43	41	14	22
14	276	62	1,260	146	238	1,150	109	223	36	29	13	111
15	178	288	785	148	194	1,200	106	164	34	24	12	25
16	140	421	471	89	138	1,260	92	134	33	21	11	12
17	86	186	429	75	235	910	86	140	31	21	12	9.9
18	62	104	375	62	939	642	91	124	29	21	11	8.7
19	48	78	305	60	1,400	608	92	103	27	20	12	7.5
20	43	72	264	55	1,460	778	78	93	25	32	12	13
21	52	100	204	55	1,450	606	72	84	24	26	14	44
22	71	91	313	57	714	805	70	75	25	22	12	18
23	70	68	691	58	688	554	66	70	25	19	12	12
24	58	46	443	56	1,630	407	61	67	24	41	9.3	8.7
25	51	40	242	56	1,650	326	56	173	23	54	9.4	7.8
26	50	38	191	59	1,580	275	53	197	21	35	10	9.6
27	50	40	160	42	1,430	243	51	124	22	62	17	13
28	51	68	140	52	1,440	233	51	97	21	36	13	11
29	52	212	130	45	-----	220	51	84	23	25	10	9.8
30	57	914	106	42	-----	189	50	69	23	23	10	31
31	68	-----	106	38	-----	163	-----	61	-----	21	8.7	-----
TOTAL	2,114	5,171	12,019	4,095	18,371	19,942	2,813	5,537	1,143	1,023	434.4	482.6
MEAN	68.2	172	388	132	656	643	93.8	179	38.1	33.0	14.0	16.1
MAX	331	914	1,330	910	1,650	1,440	201	648	73	144	23	111
MIN	21	38	106	38	25	163	50	48	21	17	8.7	7.1

CAL YR 1970 TOTAL 87,629.0 MEAN 240 MAX 1,510 MIN 17
 WTR YR 1971 TOTAL 73,145.0 MEAN 200 MAX 1,650 MIN 7.1

03136000 Mohican River at Greer, Ohio

LOCATION.--Lat 40°30'53", long 82°11'44", in NW 1/4 sec.10, T.8 N., R.10 W., Knox County, on left bank 3,000 ft downstream from bridge on State Highway 514 at Greer, 5 miles upstream from Negro Run, and 7 miles downstream from Lake Fork.

DRAINAGE AREA.--948 sq mi.

PERIOD OF RECORD.--September 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 872.91 ft above mean sea level, adjustment of 1912. Prior to July 22, 1931, nonrecording gage at site 3,000 ft upstream at same datum.

AVERAGE DISCHARGE.--50 years, 870 cfs.

EXTREMES.--Current year: Maximum discharge, 4,910 cfs Feb. 22 (gage height, 5.67 ft); maximum gage height, 9.54 ft Feb. 5 (backwater from ice); minimum discharge, 118 cfs Aug. 21.

Period of record: Maximum discharge, 20,000 cfs July 5, 1969 (gage height, 14.59 ft); minimum, 50 cfs (estimated) Jan. 2, 1935. Flood of March 1913 reached a stage of 27.0 ft (discharge, 55,000 cfs, estimated).

REMARKS.--Records good. Flow regulated by Charles Mill Reservoir on Black Fork (30 miles upstream), Pleasant Hill Reservoir on Clear Fork (17 miles upstream), and Mohicanville Reservoir on Lake Fork (19 miles upstream) beginning August 1936. (See stations 03129500 03133000, and 03134500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 623: 1924(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	403	1,300	640	250	3,450	842	396	492	282	220	163
2	257	403	1,080	620	240	3,540	974	380	456	264	211	163
3	220	927	960	600	230	3,380	897	388	438	237	198	159
4	201	971	1,310	963	220	2,430	831	404	438	216	193	155
5	178	762	1,370	1,660	2,100	1,830	765	388	404	202	184	151
6	170	663	1,080	1,240	1,700	1,590	700	3,270	501	193	175	151
7	174	620	861	1,000	1,180	2,100	690	2,920	670	180	167	143
8	174	567	729	800	900	1,840	610	2,860	483	171	159	163
9	201	498	652	700	750	1,680	600	2,380	429	167	151	155
10	263	536	609	620	650	1,620	590	1,920	396	198	143	151
11	257	516	588	580	600	1,550	560	1,710	348	530	264	151
12	241	403	1,270	560	600	1,380	540	1,940	340	809	264	155
13	471	355	1,980	540	630	2,350	540	1,990	372	438	207	175
14	806	419	1,880	600	600	2,540	630	1,860	348	356	193	510
15	663	609	1,740	680	550	2,530	630	1,680	327	314	180	295
16	620	872	1,580	550	483	2,790	600	1,350	321	288	167	226
17	652	707	1,360	520	550	2,560	580	1,050	301	264	155	202
18	620	609	1,320	492	1,350	2,290	580	1,010	288	253	147	193
19	557	557	1,550	470	2,000	2,140	570	820	275	237	135	184
20	371	557	1,430	440	3,370	2,360	540	690	259	231	128	216
21	323	609	1,160	420	2,710	2,070	520	660	242	231	121	465
22	379	536	1,240	396	3,740	2,170	510	610	242	220	159	270
23	387	471	1,660	388	3,440	1,920	492	560	237	207	207	226
24	453	453	1,520	380	3,930	1,650	474	520	226	193	171	226
25	480	379	1,300	372	3,740	1,460	456	660	242	356	159	264
26	435	387	1,070	388	4,020	1,320	438	809	259	275	151	275
27	279	379	952	364	3,920	1,140	429	721	248	308	327	259
28	246	411	842	350	3,670	1,080	420	690	231	295	242	193
29	241	557	776	300	-----	1,040	412	650	270	264	193	193
30	268	1,240	700	280	-----	974	396	590	264	248	175	216
31	403	-----	680	260	-----	908	-----	540	-----	237	167	-----
TOTAL	11,369	17,376	36,549	18,173	48,123	61,682	17,816	36,416	10,347	8,664	5,713	6,448
MEAN	367	579	1,179	586	1,719	1,990	594	1,175	345	279	184	215
MAX	806	1,240	1,980	1,660	4,020	3,540	974	3,270	670	809	327	510
MIN	170	355	588	260	220	908	396	380	226	167	121	143

CAL YR 1970 TOTAL 319,952 MEAN 877 MAX 3,880 MIN 159
WTR YR 1971 TOTAL 278,676 MEAN 763 MAX 4,020 MIN 121

MUSKINGUM RIVER BASIN

03136500 Kokosing River at Mount Vernon, Ohio

LOCATION.--Lat 40°24'20", long 82°30'00", in sec. 2, T.6S., R.13W., Knox County, on right bank at downstream side of Tilden Avenue Bridge at Mount Vernon, 0.8 mile downstream from North Branch, and 2.7 miles upstream from Dry Creek.

DRAINAGE AREA.--202 sq mi.

PERIOD OF RECORD.--February 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 984.16 ft above mean sea level, (levels by Corps of Engineers). Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--18 years, 191 cfs (12.84 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,930 cfs Feb. 22 (gage height, 5.66 ft); minimum, 18 cfs Sept. 5, 6, 7, 9, 10, 12, 13. Period of record: Maximum discharge, 30,000 cfs Jan. 21, 1959 (gage height, 18.19 ft), from rating curve extended above 6,400 cfs on basis of slope-area measurement of peak flow; minimum, 12 cfs Sept. 29, 30, 1954; minimum gage height, 0.99 ft Sept. 16, 1967.

REMARKS.--Records good. Some regulation by Knox Lake (capacity, 3,750 acre-ft) 8.2 miles upstream on East Branch of North Branch Kokosing River beginning in 1954. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio, 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	43	142	109	48	436	214	59	71	47	28	22
2	39	92	118	103	48	360	320	59	71	45	27	22
3	37	259	111	99	46	30	296	67	121	42	29	21
4	35	157	252	409	56	280	223	65	98	39	31	21
5	34	118	220	558	1,250	260	166	64	76	38	30	19
6	35	93	163	246	530	300	150	1,390	110	38	28	20
7	34	79	127	200	244	915	140	929	250	39	27	20
8	33	69	108	170	156	500	128	1,160	143	38	25	20
9	33	63	99	150	112	356	119	694	96	39	24	20
10	35	58	95	140	100	368	102	428	78	38	40	19
11	34	55	99	130	94	340	94	336	68	43	40	20
12	36	53	822	120	98	352	90	445	64	44	30	19
13	55	53	1,020	110	163	894	90	424	74	43	27	22
14	65	57	539	120	180	754	104	324	74	39	26	27
15	59	97	337	150	128	718	102	271	61	33	24	23
16	49	128	249	130	100	664	94	271	57	32	24	22
17	45	104	272	110	281	475	96	445	53	31	24	22
18	43	89	250	92	709	396	114	250	51	29	25	21
19	41	79	213	82	774	412	110	190	48	29	23	19
20	41	78	185	76	1,400	495	106	158	46	31	24	25
21	51	87	164	72	711	408	106	121	46	30	24	29
22	69	88	336	70	1,700	475	108	106	46	27	24	27
23	62	77	637	66	1,820	344	106	96	45	26	22	24
24	61	64	376	62	736	284	76	94	54	37	22	22
25	52	60	239	58	470	259	68	155	48	38	22	20
26	47	57	188	56	730	244	65	169	47	36	22	21
27	44	59	168	54	874	223	64	126	45	33	22	21
28	43	65	144	52	605	214	68	106	45	34	23	21
29	42	72	134	52	-----	223	65	94	48	33	23	21
30	44	138	121	50	-----	250	62	85	47	32	22	22
31	43	-----	117	50	-----	232	-----	78	-----	31	22	-----
TOTAL	1,381	2,591	8,045	3,946	14,163	12,731	3,646	9,259	2,182	1,114	804	652
MEAN	44.5	86.4	260	127	506	411	122	299	72.7	35.9	25.9	21.7
MAX	69	259	1,020	558	1,820	915	320	1,390	250	47	40	29
MIN	33	43	95	50	46	214	62	59	45	26	22	19
CFSM	.22	.43	1.29	.63	2.51	2.03	.60	1.48	.36	.18	.13	.11
IN.	.25	.48	1.48	.73	2.61	2.34	.67	1.71	.40	.21	.15	.12
CAL YR 1970	TOTAL 77,668	MEAN 213	MAX 4,460	MIN 33	CFSM 1.05	IN 14.30						
WTR YR 1971	TOTAL 60,514	MEAN 166	MAX 1,820	MIN 19	CFSM .82	IN 11.14						

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	2130	4.88	2,120	5-6	1300	5.31	2,550
2-22	1800	5.66	2,930				

03137000 Kokosing River at Millwood, Ohio

LOCATION.--Lat 40°23'51", long 82°17'09", in SE 1/4 T. 7N., E. 11W., Knox County, on left bank 0.4 mile west of Millwood, 1.5 miles upstream from Honey Run, and 2 miles downstream from Jelloway Creek.

DRAINAGE AREA.--4.5 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Published as "near Millwood" October 1921 to July 1939. Records published for both sites October 1938 to July 1939.

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft above mean sea level. Prior to July 10, 1931, nonrecording gage at site 3.8 miles downstream, and July 10, 1931, to July 31, 1939, water-stage recorder at site 3.5 miles downstream at datum 23.94 ft lower.

AVERAGE DISCHARGE.--50 years, 473 cfs (14.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,880 cfs Feb. 22 (gage height, 11.62 ft); minimum 50 cfs Sept. 6, 7, 10, 11. Period of record: Maximum discharge, 75,900 cfs Jan. 21, 1959 (gage height, 34.00 ft, from high-water mark in well), from rating curve extended above 20,000 cfs on basis of slope-area measurement of peak flow; minimum, 33 cfs Aug. 17, 26, 1932, Sept. 27, 28, 1954. Flood in March 1913 reached a stage corresponding to 22.0 ft at former site and datum (discharge, 40,000 cfs, estimated).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSF 803: 1933, 1935. WRD Ohio, 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	86	227	240	110	934	442	167	186	113	74	57
2	92	145	197	230	110	806	579	170	181	110	70	56
3	96	400	194	220	110	680	562	191	223	102	72	56
4	84	278	422	937	180	580	444	184	225	98	94	59
5	78	206	454	1,260	2,310	520	367	181	186	94	92	56
6	76	170	347	580	1,080	600	339	3,620	712	94	77	52
7	74	143	281	440	537	1,760	321	2,140	1,210	94	72	54
8	80	125	245	390	347	1,110	301	2,600	441	92	68	70
9	80	115	230	350	249	765	284	1,670	308	92	65	57
10	80	106	215	320	230	765	262	1,070	250	92	71	54
11	82	100	218	300	210	697	242	799	215	148	171	53
12	80	98	935	280	240	722	236	769	197	128	91	55
13	145	96	2,030	270	400	1,860	235	780	212	104	76	61
14	133	100	1,120	300	386	1,600	254	613	209	96	71	101
15	125	194	720	340	327	1,510	247	519	182	90	68	71
16	110	218	558	280	253	1,500	234	480	167	86	65	65
17	96	185	625	240	424	1,100	227	720	156	84	63	63
18	90	160	566	210	1,420	891	240	499	147	80	63	61
19	86	145	494	196	1,650	889	233	388	142	80	62	59
20	84	145	430	180	2,930	1,010	226	341	137	82	66	102
21	98	150	386	170	1,540	869	228	293	131	76	69	128
22	120	150	680	160	3,670	940	236	264	128	74	66	81
23	118	135	1,360	150	3,880	816	229	244	125	72	64	72
24	108	118	920	140	1,640	694	209	234	125	110	61	65
25	102	110	606	130	1,120	616	185	337	125	133	61	61
26	94	106	440	130	1,380	573	177	347	123	96	68	64
27	88	108	380	130	1,700	529	173	285	118	90	64	64
28	84	118	320	120	1,280	503	189	253	110	84	62	62
29	88	123	290	120	-----	480	182	231	125	86	61	61
30	98	197	270	120	-----	493	173	213	115	82	59	75
31	94	-----	250	110	-----	459	-----	198	-----	80	57	-----
TOTAL	2,955	4,530	16,410	9,037	29,713	27,271	8,256	20,800	6,911	2,944	2,243	1,995
MEAN	95.3	151	529	292	1,061	880	275	671	230	95.0	72.4	66.5
MAX	145	406	2,030	1,260	3,880	1,860	579	3,620	1,210	148	171	128
MIN	74	86	194	110	110	459	173	167	110	72	57	52
CFSM	.21	.33	1.16	.64	2.33	1.93	.60	1.47	.51	.21	.16	.15
IN.	.24	.37	1.34	.74	2.43	2.23	.67	1.70	.57	.24	.18	.16

CAL YR 1970 TOTAL 178,411 MEAN 489 MAX 7,530 MIN 74 CFSM 1.07 IN 14.59
WTR YR 1971 TOTAL 133,065 MEAN 365 MAX 3,880 MIN 52 CFSM .80 IN 10.88

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1930	11.82	5,880	5-6	1400	11.62	5,640

03138500 Walhonding River below Mohawk Dam, at Nellie, Ohio

LOCATION.—Lat 40°20'29", long 82°03'56", in T.6 N., R.8 W., Coshocton County, on right bank at upstream side of bridge on U.S. Highway 36 at Nellie, 0.5 mile upstream from Mohawk Creek and 1.7 miles downstream from Mohawk Dam.

DRAINAGE AREA.—1,505 sq mi.

PERIOD OF RECORD.—December 1910 to March 1913 (gage heights and discharge measurements only), September 1921 to current year.
Published as Mohican River at Pomerene 1910-13, as Walhonding River at Pomerene 1921-37, and as Walhonding River at Nellie 1938-39.

GAGE.—Water-stage recorder. Datum of gage is 790.00 ft above mean sea level, adjustment of 1912. Prior to Nov. 7, 1925, nonrecording gage and Nov. 7, 1925, to Sept. 30, 1937, water-stage recorder at site 3.8 miles upstream at datum 15.53 ft higher. Oct. 1, 1937, to Sept. 30, 1938, nonrecording gage at present site at datum 2.09 ft higher.

AVERAGE DISCHARGE.—50 years, 1,435 cfs.

EXTREMES.—Current year: Maximum discharge, 7,730 cfs Mar. 2, 3 (gage height, 11.66 ft); minimum daily, 198 cfs Sept. 11.

Period of record: Maximum discharge at site at Pomerene, 43,800 cfs Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 cfs Jan. 25, 26, 1937 (gage height, 18.8 ft, present datum, from floodmarks); minimum daily discharge, 19 cfs Feb. 27, 1934.

Flood of March 1913 reached a stage of 26.9 ft (discharge, 102,000 cfs) present site and datum, from information by Corps of Engineers.

REMARKS.—Records good. Flow regulated beginning 1936 by 4 flood-control reservoirs at points 1.7 to 54 miles upstream (see stations 03129500, 03133000, 03134500, and 03138000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	499	1,830	951	420	7,440	1,390	536	695	395	346	225
2	413	539	1,500	890	390	7,580	1,510	532	733	419	319	221
3	340	1,230	1,310	854	400	7,430	1,640	558	740	367	318	221
4	308	1,450	1,680	1,430	430	7,130	1,380	571	755	351	329	221
5	272	1,050	2,180	3,450	1,600	4,680	1,230	553	680	345	334	221
6	258	890	1,640	2,370	2,620	2,680	1,100	1,070	658	334	318	212
7	218	823	1,330	1,820	2,170	3,900	1,070	4,190	1,840	329	287	203
8	263	748	1,110	1,550	2,470	4,160	993	5,290	1,660	329	277	221
9	263	688	994	1,350	1,090	3,190	925	5,770	815	329	263	230
10	334	658	930	1,200	1,000	2,890	884	5,670	838	324	258	207
11	356	658	890	1,080	945	2,770	831	5,430	673	499	425	198
12	351	581	1,590	995	960	2,430	795	5,260	602	1,090	425	203
13	448	486	4,640	968	1,090	3,680	788	4,220	616	616	329	225
14	978	560	3,610	1,010	1,100	4,960	838	3,420	616	493	287	425
15	785	778	2,990	1,190	1,090	4,600	879	2,640	560	436	272	480
16	733	1,210	2,510	1,010	982	4,800	821	2,270	525	407	258	319
17	755	1,080	2,260	950	939	4,660	793	1,920	493	373	239	282
18	703	890	2,120	850	1,650	4,100	793	1,810	467	356	239	263
19	665	838	2,250	800	2,720	3,570	779	1,470	448	345	234	253
20	506	800	2,120	800	3,620	3,710	746	1,200	431	340	239	253
21	448	868	1,770	800	5,240	3,630	725	1,090	419	351	258	560
22	506	815	1,890	800	4,080	3,450	728	984	407	313	258	436
23	512	755	3,330	750	3,110	3,400	705	899	401	297	308	329
24	588	673	2,930	750	4,830	2,870	670	833	384	345	258	287
25	595	595	2,250	700	6,820	2,340	629	902	384	574	239	313
26	560	616	1,790	600	7,110	2,240	592	1,230	390	442	234	340
27	419	581	1,500	489	7,210	1,920	568	1,060	395	395	230	351
28	345	609	1,320	450	7,400	1,760	572	1,010	384	419	431	297
29	345	703	1,160	430	-----	1,670	573	948	419	384	282	258
30	373	1,330	1,040	450	-----	1,590	550	880	425	367	253	268
31	499	-----	989	460	-----	1,480	-----	809	-----	351	230	-----
TOTAL	14,678	24,001	59,453	32,197	73,886	116,710	26,497	65,025	18,853	12,715	8,951	8,522
MEAN	473	800	1,918	1,039	2,639	3,765	883	2,098	628	410	289	284
MAX	978	1,450	4,640	3,450	7,400	7,580	1,640	5,770	1,840	1,090	431	560
MIN	258	486	890	430	390	1,480	550	532	384	297	230	198

CAL YR 1970 TOTAL 565,078 MEAN 1,548 MAX 7,480 MIN 248
WTR YR 1971 TOTAL 461,488 MEAN 1,264 MAX 7,580 MIN 198

03139000 Killbuck Creek at Killbuck, Ohio

LOCATION.--Lat 40°29'41", long 81°59'12", Holmes County, on right bank at downstream side of highway bridge at Killbuck, 0.3 mile downstream from Black Creek, and 0.9 mile upstream from bridge on U.S. Highway 62.

DRAINAGE AREA.--462 sq mi.

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder and nonrecording gage read once daily. Datum of gage is 788.05 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 384 cfs (11.29 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,340 cfs Feb. 23 (gage height, 15.67 ft); minimum, 36 cfs Sept. 6, 7.
Period of record: Maximum discharge, 47,500 cfs July 5, 1969 (gage height, 26.40 ft, from floodmarks), from rating curve extended above 11,000 cfs on basis of slope-area measurement of peak flow; minimum, 23 cfs Sept. 10-15, 28-30, 1954.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	115	563	245	90	1,650	387	164	160	77	69	44
2	86	129	499	227	80	1,330	473	162	150	76	64	43
3	97	566	396	205	75	1,040	458	167	167	70	64	50
4	96	627	635	539	85	751	412	161	159	66	77	50
5	85	588	643	974	855	636	382	157	150	62	77	43
6	83	482	550	715	1,010	634	369	1,530	192	61	67	37
7	82	363	407	638	806	1,290	360	1,870	540	61	61	39
8	45	266	306	501	672	1,290	330	1,630	268	58	57	55
9	85	209	270	406	539	1,100	310	1,370	204	58	52	47
10	90	180	252	337	470	920	302	1,000	182	63	65	39
11	117	169	245	284	380	818	291	633	165	165	70	39
12	103	150	541	253	300	768	271	526	159	317	64	40
13	244	147	1,080	234	380	1,460	236	562	165	142	56	51
14	414	144	1,020	276	350	1,770	262	479	172	104	53	111
15	323	411	986	294	300	1,740	254	383	175	88	49	105
16	233	550	946	224	280	1,710	244	337	155	119	45	74
17	186	470	908	200	260	1,590	233	344	137	91	46	60
18	157	343	799	180	750	1,400	237	311	131	72	45	52
19	136	250	690	170	1,260	1,260	221	279	116	69	43	49
20	125	236	594	170	2,020	1,220	208	252	114	80	46	68
21	127	268	493	160	2,140	1,120	201	242	109	78	48	160
22	151	238	546	160	2,390	1,080	202	220	107	75	47	99
23	104	205	826	150	3,250	990	199	204	101	66	51	74
24	95	176	767	150	2,880	865	190	207	93	83	44	61
25	86	165	629	149	2,490	732	181	257	86	198	41	54
26	79	151	480	162	2,280	638	174	284	85	132	43	54
27	75	151	397	150	2,120	556	171	266	83	109	47	41
28	75	164	326	140	1,910	514	174	232	78	98	44	58
29	76	194	280	120	-----	470	170	215	87	84	41	54
30	95	514	265	110	-----	447	166	200	85	78	40	60
31	120	-----	263	100	-----	411	-----	180	-----	75	43	-----
TOTAL	4,002	8,731	17,604	8,573	30,424	32,200	8,068	14,824	4,577	2,975	1,659	1,831
MEAN	129	291	568	277	1,087	1,039	269	478	153	96.0	53.5	61.0
MAX	414	666	1,080	924	3,250	1,770	473	1,870	540	317	77	160
MIN	75	115	245	100	75	411	166	157	78	58	40	37
CFSM	.28	.63	1.23	.60	2.35	2.25	.58	1.03	.33	.21	.12	.13
IN.	.32	.70	1.42	.69	2.45	2.59	.65	1.19	.37	.24	.13	.15
CAL YR 1970	TOTAL 149,372		MEAN 409		MAX 2,050		MIN 59		CFSM .89		IN 12.03	
WTR YR 1971	TOTAL 135,468		MEAN 371		MAX 3,250		MIN 37		CFSM .80		IN 10.91	

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	1300	15.67	3,340	5-6	2000	14.75	2,420

MUSKINGUM RIVER BASIN

03140000 Mill Creek near Coshocton, Ohio

LOCATION.—Lat 40°21'46", long 81°51'45", Coshocton County, on left bank 0.5 mile downstream from Little Mill Creek and 6 miles north of Coshocton.

DRAINAGE AREA.—27.2 sq mi.

PERIOD OF RECORD.—October 1936 to current year. Monthly discharge only for October 1936, published in WSP 1305.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 782.00 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.—35 years, 26.9 cfs (13.43 inches per year).

EXTREMES.—Current year: Maximum discharge, 1,980 cfs May 6 (gage height, 10.98 ft); minimum, 0.06 cfs Aug. 19, 20 (gage height, 0.47 ft).

Period of record: Maximum discharge, 8,720 cfs July 5, 1969 (gage height, 13.92 ft), from rating curve extended above 2,200 cfs on basis of slope-area measurement of peak flow; no flow Sept. 28, 29, 1954, Aug. 29-31, 1962, and part of each day Dec. 23, 31, 1963.

REMARKS.—Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 1143: 1946, 1947-48(P). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	7.9	23	13	2.3	43	14	4.1	4.9	1.1	.56	2.5
2	.87	41	19	12	1.7	36	15	4.4	4.7	1.4	.46	2.1
3	1.5	105	28	11	1.9	28	13	4.9	7.0	.91	.44	1.9
4	1.2	30	49	198	23	29	11	4.3	4.9	.58	.77	1.9
5	.83	21	33	83	256	25	11	4.6	4.3	.62	.71	1.7
6	.68	16	26	39	26	63	10	6.7	7.3	.59	.50	1.4
7	.64	13	21	28	11	230	10	143	8.5	.53	.36	1.4
8	.60	11	19	22	8.7	79	9.5	167	4.7	.48	.26	1.4
9	.54	9.5	18	20	8.0	53	9.0	79	4.0	1.5	.21	1.2
10	.67	9.7	15	18	9.2	49	8.0	51	3.5	1.3	1.2	1.1
11	21	9.3	18	16	8.0	50	7.5	39	3.2	16	1.3	1.0
12	8.1	8.7	169	15	9.5	55	7.8	39	3.2	4.0	.50	.96
13	11	8.7	88	13	23	178	7.8	31	7.0	1.8	.36	9.0
14	8.4	9.9	49	22	20	95	8.7	25	7.5	1.2	.25	8.5
15	10	58	36	16	11	89	7.0	21	4.0	.91	.20	3.2
16	5.0	34	36	12	9.5	65	7.0	20	3.4	.71	.14	2.3
17	3.4	25	44	11	29	49	7.3	20	2.8	.52	.11	2.1
18	2.6	21	34	10	90	41	7.0	15	2.4	.56	.09	1.9
19	2.5	17	30	8.7	249	42	6.0	13	2.2	1.1	.06	2.3
20	2.4	20	24	8.0	434	41	5.9	12	1.9	1.9	.12	4.1
21	4.8	19	22	8.2	102	36	6.0	10	1.9	.74	.30	2.5
22	6.0	16	98	8.5	532	34	6.2	9.2	1.6	.53	.50	2.1
23	4.2	14	73	8.5	154	32	5.7	8.5	1.4	.46	1.9	1.9
24	3.5	11	47	7.5	63	28	5.5	8.5	1.4	1.3	.74	1.7
25	3.1	10	35	8.2	53	24	4.9	12	1.4	2.0	.40	1.5
26	2.8	11	28	8.0	62	23	5.3	9.0	1.2	1.0	5.7	1.6
27	2.5	12	24	6.0	95	20	4.9	8.0	1.2	.77	205	2.0
28	2.3	12	20	4.9	56	20	5.9	7.3	1.1	.56	10	2.0
29	2.6	15	17	4.3	-----	18	4.7	6.6	1.2	.50	6.0	1.7
30	12	31	15	4.0	-----	16	4.4	6.2	1.1	.56	4.1	1.4
31	12	-----	14	3.2	-----	14	-----	5.5	-----	.59	3.0	-----
TOTAL	138.85	626.7	1,173	647.0	2,347.8	1,604	236.0	1,475.1	103.9	46.92	246.24	70.36
MEAN	4.48	20.9	37.8	20.9	83.9	51.7	7.87	47.6	3.46	1.51	7.94	2.35
MAX	21	105	169	198	532	230	15	687	8.5	16	205	9.0
MIN	.54	7.9	14	3.2	1.7	14	4.4	4.1	1.1	.46	.06	.96
CFSM	.16	.77	1.39	.77	3.08	1.90	.29	1.75	.13	.06	.29	.09
IN.	.19	.86	1.60	.88	3.21	2.19	.32	2.02	.14	.06	.34	.10
CAL YR 1970	TOTAL	10,735.05	MEAN	29.4	MAX	732	MIN	.15	CFSM	1.08	IN	14.68
WTR YR 1971	TOTAL	8,715.87	MEAN	23.9	MAX	687	MIN	.06	CFSM	.88	IN	11.92

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1145	9.68	1,090	5-6	0900	10.98	1,980

67

LOCATION.--Lat 40°14'54", long 81°52'23", in T.5 N., R.6 W., Coshocton County, on right bank at upstream side of highway bridge, 1 mile southwest of Coshocton, and 2 miles downstream from confluence of Tuscarawas and Walhonding Rivers.

PERIOD OF RECORD.--July 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 730.00 ft above mean sea level, adjustment of 1912. Prior to Sept. 19, 1936, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 4,708 cfs.

EXTREMES.—Current year: Maximum discharge, 21,500 cfs Feb. 22 (gage height, 10.37 ft); minimum, 612 cfs Aug. 19. Period of record: Maximum discharge, 78,700 cfs Jan. 26, 1937 (gage height, 21.98 ft); minimum, 342 cfs Nov. 4, 1944. Flood of March 1913 reached a stage of about 28.8 ft (discharge, 202,000 cfs), computed by Corps of Engineers.

REMARKS.--Records good. Flow regulated by 12 flood-control reservoirs at points 19 to 88 miles upstream (see pp. 79, 80). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,540	3,520	6,920	4,600	1,700	19,300	5,190	2,080	2,420	1,430	1,040	799
2	1,390	4,080	7,200	4,000	1,700	18,600	4,910	2,030	2,250	1,350	990	781
3	1,240	5,840	6,450	3,630	1,800	17,100	4,990	2,040	2,310	1,230	934	790
4	1,200	7,380	6,400	5,010	2,000	15,700	5,150	2,050	2,370	1,140	952	754
5	1,150	7,580	8,200	9,380	6,540	14,300	4,750	2,030	2,300	1,070	980	745
6	1,080	7,100	8,060	10,100	11,500	11,500	4,280	8,500	2,340	1,000	961	727
7	1,020	6,230	6,900	8,220	8,160	14,300	4,000	14,400	3,520	952	925	754
8	980	5,190	5,860	6,590	8,740	15,700	4,080	16,400	4,380	925	880	736
9	1,000	4,280	5,330	5,570	7,720	14,700	3,680	16,700	3,260	934	835	745
10	1,060	3,770	4,990	5,000	5,350	13,100	3,490	15,500	2,880	952	808	736
11	1,350	3,550	4,830	4,670	4,720	12,100	3,320	12,200	2,550	1,260	925	789
12	1,690	3,470	6,220	4,320	4,220	10,500	3,150	11,200	2,230	2,910	1,020	676
13	1,920	3,220	11,400	4,090	4,110	12,100	3,040	10,100	2,160	3,000	943	853
14	3,090	3,140	12,100	4,040	4,590	15,600	3,000	9,480	2,200	2,110	835	1,480
15	4,030	4,220	11,700	4,520	4,220	16,400	3,120	8,080	2,180	1,640	781	2,240
16	3,550	6,470	10,800	4,750	3,950	16,400	3,190	7,200	2,130	1,400	745	1,780
17	3,180	7,540	10,300	4,190	3,680	15,800	3,050	6,450	1,940	1,350	709	1,420
18	2,590	6,940	9,800	3,560	4,830	14,500	2,950	6,140	1,810	1,259	676	1,210
19	2,240	5,980	9,260	3,300	8,260	13,100	2,910	5,410	1,690	1,160	668	1,150
20	1,980	5,330	8,500	3,040	13,900	11,700	2,830	4,650	1,580	1,170	709	1,140
21	1,820	5,140	7,300	3,000	16,300	11,300	2,700	4,200	1,490	1,150	745	1,420
22	1,810	5,050	7,040	3,070	19,600	10,800	2,650	3,820	1,410	1,130	772	1,490
23	1,910	4,700	9,300	3,150	19,000	10,100	2,600	3,430	1,400	1,090	970	1,360
24	2,050	4,250	10,100	2,970	19,600	9,800	2,530	3,140	1,390	1,130	844	1,140
25	1,990	3,920	9,200	2,940	21,100	8,480	2,410	3,090	1,320	1,460	790	1,060
26	1,870	3,690	7,660	2,880	20,800	7,660	2,300	3,420	1,280	1,580	890	1,050
27	1,690	3,600	6,380	2,630	20,200	7,060	2,180	3,440	1,260	1,490	1,560	1,040
28	1,500	3,600	5,820	2,170	20,000	6,790	2,180	3,320	1,210	1,340	1,640	1,040
29	1,450	3,760	5,420	1,700	20,000	6,650	2,170	3,070	1,310	1,240	1,460	952
30	1,600	4,650	5,240	1,800	-----	6,160	2,130	2,860	1,300	1,150	1,070	952
31	2,390	-----	4,920	1,800	-----	5,660	-----	2,650	-----	1,090	889	-----
TOTAL	57,360	147										

03141500 Seneca Fork below Senecaville Dam, near Senecaville, Ohio

LOCATION.--Lat 39°55'28", long 81°26'17", Guernsey County, on left bank 650 ft downstream from Senecaville Dam, and 1.5 miles south-east of Senecaville.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--September 1938 to current year. Published as Seneca Fork near Senecaville prior to 1940.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.00 ft above mean sea level, adjustment of 1912. Prior to Jan. 24, 1942, at site 150 ft downstream at same datum.

AVERAGE DISCHARGE.--33 years, 125 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 682 cfs May 13; maximum gage height, 8.27 ft Dec. 22; minimum daily discharge, 1.1 cfs Feb. 20.

Period of record: Maximum discharge, 914 cfs Apr. 7, 1964; maximum gage height, 10.35 ft Feb. 1, 1949; no flow May 3, 4, 1939, Jan. 28, 29, Feb. 4, 5, Apr. 25, 1952.

REMARKS.--Records good. Flow regulated by Senecaville Reservoir (see station 03141000). Water is diverted from Senecaville Reservoir for U. S. Fish Hatchery; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	45	466	112	3.6	621	5.6	6.3	3.6	6.3	7.6	4.0
2	4.6	79	474	37	3.6	625	5.6	6.3	19	5.6	3.6	4.0
3	4.2	74	473	17	3.4	462	5.6	6.3	30	5.6	3.6	3.4
4	3.6	88	363	132	3.0	588	5.6	6.6	30	6.0	2.7	3.2
5	3.6	228	140	293	2.9	583	5.6	6.6	30	5.3	3.4	3.6
6	3.6	427	140	422	162	582	5.6	7.6	30	4.6	4.0	3.6
7	3.6	491	67	504	449	333	5.6	214	30	6.0	4.0	3.2
8	3.6	487	9.5	441	370	341	5.6	167	52	6.9	3.6	3.4
9	3.4	481	19	358	511	578	5.6	15	94	6.9	3.6	3.6
10	3.2	473	54	354	446	575	5.6	278	42	6.9	3.4	4.0
11	3.2	473	94	117	4.0	333	5.6	566	14	6.9	3.0	4.0
12	3.6	467	79	5.0	49	172	5.3	671	19	6.6	3.2	4.2
13	3.6	464	20	5.0	164	174	6.0	675	14	6.6	3.6	4.4
14	2.4	462	208	5.3	160	172	6.3	673	7.2	6.6	4.0	4.6
15	2.6	304	474	74	158	52	6.3	665	7.2	6.3	4.2	4.6
16	2.7	279	518	208	42	3.8	6.3	656	6.9	6.0	4.0	4.6
17	2.9	513	544	379	2.0	5.0	6.3	264	7.2	6.6	4.2	4.4
18	2.3	560	533	295	2.3	5.3	6.3	3.6	6.3	6.9	3.8	4.0
19	1.9	562	526	2.7	2.3	5.3	6.3	3.4	5.3	6.9	3.8	3.8
20	2.0	571	518	2.7	1.1	5.3	6.0	3.2	6.0	7.2	4.0	4.2
21	1.9	569	511	2.6	96	5.3	6.0	2.3	6.6	7.2	4.2	4.6
22	2.2	562	413	2.4	79	5.0	6.3	1.5	6.0	7.2	4.4	4.4
23	3.0	558	222	3.0	5.6	5.0	6.3	2.2	3.4	7.2	4.6	3.6
24	3.2	509	384	41	6.0	5.3	6.3	9.1	3.2	7.2	4.2	3.2
25	3.0	481	435	196	180	5.3	6.3	24	2.6	7.2	4.4	3.2
26	3.0	480	429	150	525	5.3	6.0	52	2.2	6.6	4.6	3.4
27	3.4	480	425	12	616	5.3	6.0	107	2.0	6.6	4.6	3.0
28	3.2	476	474	2.3	610	5.6	6.0	122	3.4	7.9	4.2	3.6
29	2.9	473	505	3.4	-----	5.6	6.0	113	6.3	11	4.2	3.2
30	2.9	471	499	318	-----	5.6	6.0	45	6.6	11	4.0	7.6
31	3.6	-----	363	250	-----	5.6	-----	11	-----	11	4.0	-----
TOTAL	97.7	12,587	10,379.5	4,744.4	4,656.8	6,274.6	177.9	5,383.0	496.0	216.8	124.9	116.8
MEAN	3.15	420	335	153	166	202	5.93	174	16.5	6.99	4.03	3.96
MAX	4.8	571	544	504	616	625	6.3	675	94	11	7.6	7.6
MIN	1.9	45	9.5	2.3	1.1	3.8	5.3	1.5	2.0	4.6	2.7	3.0
(+)	1.67	.96	1.22	1.83	1.83	1.78	1.82	1.13	1.67	2.18	1.48	1.71

CAL YR 1970 TOTAL 55,288.7 MEAN 151 MAX 718 MIN 1.7 (+) 1.48

WTR YR 1971 TOTAL 45,257.4 MEAN 124 MAX 675 MIN 1.1 (+) 1.60

+ Diversion for water supply for U. S. Fish Hatchery; furnished by Senecaville National Fish Hatchery.

MUSKINGUM RIVER BASIN

69

03142000 Wills Creek at Cambridge, Ohio

LOCATION.--Lat 40°00'52", long 81°35'14", Guernsey County, on left bank at upstream side of Fairground Bridge on South Winth Street in Cambridge, 0.9 mile downstream from Leatherwood Creek.

DRAINAGE AREA.--406 sq mi.

PERIOD OF RECORD.--June 1926 to September 1928, May 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft above mean sea level, adjustment of 1912. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 miles downstream at different datum. Oct. 6, 1927, to Sept. 30, 1928, and May 22, 1937, to Oct. 18, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years, 432 cfs (unadjusted).

EXTREMES.--Current year: Maximum discharge, 3,320 cfs Feb. 24 (gage height, 15.05 ft); minimum, 3.6 cfs Sept. 6. Period of record: Maximum discharge, about 8,300 cfs June 6 or 7, 1963; maximum gage height, 32.35 ft June 6, 1963 (backwater from tributaries); minimum discharge, 0.6 cfs Oct. 6, 1980. Flood of Aug. 8, 1935, reached a stage of 25.4 ft.

REMARKS.--Records good. Flow regulated by Senecaville Reservoir on Seneca Fork (22 miles upstream) beginning in 1937 (see station 03141000). Water is diverted 2.7 miles above station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 853: 1928(M). WSP 893: 1928. WSP 973: 1942.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	769	747	525	300	1,050	148	65	76	58	33	7.7
2	17	553	668	306	100	944	156	62	64	45	34	6.6
3	14	734	630	199	79	913	180	69	77	49	23	5.3
4	14	1,020	661	444	112	781	149	72	105	37	36	5.3
5	15	534	663	1,330	743	858	128	60	86	32	49	4.2
6	15	518	564	1,420	1,500	940	121	650	83	23	38	3.9
7	13	591	383	900	1,500	1,340	119	1,980	534	21	28	5.0
8	13	600	246	800	928	1,570	113	2,040	416	20	21	8.5
9	12	584	142	650	628	1,120	102	2,020	265	19	18	10
10	13	573	140	582	784	1,070	105	1,240	215	19	14	8.5
11	30	608	169	560	572	1,070	97	800	148	38	7.3	7.3
12	47	615	688	302	227	863	95	923	95	50	5.6	15
13	39	593	1,740	197	520	832	90	1,080	104	58	6.6	164
14	35	586	1,960	328	865	796	90	1,140	186	37	6.6	389
15	34	859	1,310	725	612	654	94	1,030	142	30	5.0	169
16	56	1,140	931	536	428	547	88	928	99	30	5.0	72
17	48	794	1,020	516	285	428	86	908	85	28	5.3	142
18	34	754	1,120	617	700	328	94	448	72	19	7.3	121
19	30	736	968	463	1,250	312	94	208	59	18	12	68
20	25	712	881	166	1,580	336	74	165	58	17	13	54
21	31	771	784	150	1,560	332	72	142	51	15	12	50
22	51	769	929	149	1,590	322	76	123	38	18	12	36
23	68	721	1,500	155	2,740	314	80	113	25	16	18	30
24	52	677	1,710	148	3,260	289	67	100	30	23	14	26
25	40	597	1,420	178	2,810	257	58	119	27	66	14	22
26	34	582	961	296	1,960	234	54	160	17	68	21	22
27	31	584	789	227	1,370	222	57	156	15	40	36	22
28	30	593	716	176	1,260	200	59	178	18	26	23	27
29	32	597	721	150	-----	196	84	174	148	25	12	30
30	66	712	723	160	-----	176	69	174	155	28	8.5	26
31	500	-----	688	550	-----	156	-----	119	-----	21	8.1	-----
TOTAL	1,479	20,466	26,552	13,905	30,383	19,450	2,899	17,456	3,667	994	546.3	1,557.3
MEAN	47.7	682	857	449	1,085	627	96.6	563	122	32.1	17.6	51.9
MAX	500	1,140	1,960	1,420	3,260	1,570	180	2,040	616	68	49	389
MIN	12	518	140	146	79	156	54	60	15	15	5.0	3.9
(*)	4.13	3.80	3.90	3.60	3.97	3.83	3.68	3.73	3.99	4.04	3.98	4.30

CAL YR 1970 TOTAL 164,699 MEAN 451 MAX 3,220 MIN 13 (+) 4.22
 WTR YR 1971 TOTAL 139,354.6 MEAN 382 MAX 3,260 MIN 3.9 (+) 3.92

* Diversion in cubic feet per second; furnished by city of Cambridge.

MUSKINGUM RIVER BASIN

03142295 Salt Fork below Salt Fork Dam, near Cambridge, Ohio

LOCATION.--Lat 40°06'15", long 81°33'15", T.3 W., R.3 W., Guernsey County, at outlets works near left end of Salt Fork Dam, 0.8 mile upstream from the mouth and 5.0 miles north of Cambridge.

DRAINAGE AREA.--159 sq mi.

PERIOD OF RECORD.--October 1970 to September 1971.

GAGE.--Water-stage recorder and morning-glory spillway control. Datum of gage is 700.00 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Same gage and elevations as Salt Fork Reservoir (station 03142290).

EXTREMES.--Current year: Maximum discharge, 363 cfs Nov. 1; maximum elevation, 801.35 ft May 18; no flow several days in Oct., Apr., May and Aug.

REMARKS.--Records good except those below 1 cfs which are poor. Sluice gates open Oct. 31 to Apr. 18. Flow completely regulated by Salt Fork Reservoir (see station 03142290). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	308	287	296	245	319	300	0	73	21	5.3	.29
2	1.2	357	286	293	243	310	300	0	68	19	5.3	.10
3	.55	352	284	291	240	317	300	0	73	16	4.7	.02
4	0	350	283	293	237	315	300	0	76	14	5.3	.02
5	.02	338	282	298	240	314	290	0	71	14	4.7	.03
6	.35	331	279	301	244	314	290	0	63	11	3.5	.03
7	.85	328	278	301	244	321	290	0	57	9.5	3.5	.09
8	1.2	327	275	300	244	326	288	0	105	8.7	3.0	.10
9	1.2	324	273	298	243	327	286	10	127	8.0	1.6	2.0
10	.55	321	271	297	240	328	283	36	114	7.3	1.6	2.5
11	5.3	319	269	295	238	327	280	50	103	9.5	2.0	.55
12	4.7	317	275	293	236	327	278	68	96	10	1.2	.55
13	5.9	314	288	291	236	328	275	107	83	9.5	.85	6.6
14	6.6	313	295	289	236	328	272	129	73	8.0	.85	15
15	5.9	312	297	289	234	328	269	139	67	5.9	.55	24
16	4.7	313	297	287	233	328	266	145	62	5.9	.10	24
17	4.7	312	298	286	231	328	264	155	56	5.3	.05	27
18	4.1	310	298	283	233	327	98	157	51	4.1	.05	27
19	3.5	309	297	282	240	326	0	155	47	4.1	.10	30
20	3.5	306	297	278	252	324	0	145	43	4.1	.55	29
21	8.0	304	296	276	261	324	0	137	37	3.5	.64	25
22	14	302	296	272	275	323	0	123	33	3.0	0	24
23	8.7	298	301	270	300	322	0	116	29	2.5	0	21
24	8.0	297	304	268	313	321	0	109	26	4.1	.05	19
25	7.3	295	306	265	318	318	0	109	24	8.0	1.0	17
26	7.3	292	306	262	319	317	0	100	20	8.7	1.8	17
27	7.3	289	305	259	321	315	0	89	19	8.7	1.9	18
28	7.3	287	302	257	321	313	0	83	19	8.0	1.7	18
29	7.3	286	301	254	-----	310	0	76	22	8.0	1.6	16
30	21	287	300	251	-----	310	0	70	24	7.3	.55	15
31	117	-----	297	248	-----	310	-----	67	-----	5.9	.55	-----
TOTAL	269.62	9,398	9,023	8,723	7,217	9,945	4,929	2,375	1,761	262.6	54.59	376.88
MEAN	8.70	313	291	281	258	321	164	76.6	58.7	8.47	1.76	12.6
MAX	117	357	306	301	321	328	300	157	127	21	5.3	30
MIN	0	286	269	248	231	310	0	0	19	2.5	0	.02

WTR YR 1971 TOTAL 54,336.69 MEAN 149 MAX 357 MIN 0

71

LOCATION.—Lat 40°09'34", long 81°50'51", in sec.22, T.4 N., R.6 W., Coshocton County, on left bank 1,200 ft downstream from Willis Creek Dam, 1.3 miles southwest of town of Will Creek, 2.7 miles southeast of Conesville, and 6.2 miles upstream from mouth.

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939, published as Wills Creek at Wills Creek.

GAGE.—Water-stage recorder. Datum of gage is 717.00 ft above mean sea level, adjustment of 1912. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939, to Sept. 30, 1949, water-stage recorder, at site 1,500 ft downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 4,960 cfs Mar. 2 (gage height, 14.81 ft); minimum daily, 19 cfs Aug. 19.
Period of record: Maximum discharge, 6,930 cfs Mar. 7, 1940; maximum gage height, 17.50 ft Mar. 22, 1964 (backwater from Muskingum River); minimum daily discharge, 1 cfs Aug. 10, Oct. 27-29, 1948, Jan. 28, 1952, July 6-9, 1969, Apr. 3, 1970.
Flood of March 1913 reached a discharge of 22,300 cfs, computed by Corps of Engineers.

REMARKS.—Records good. Flow regulated by Senecaville Reservoir on Seneca Fork (80 miles upstream), Salt Fork Reservoir (43 miles upstream), and Willis Creek Reservoir (0.2 mile upstream), see stations 03141000, 03142290, and 03143000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	378	1,190	1,190	475	4,240	695	141	333	167	63	51
2	83	910	1,270	1,110	635	4,780	680	149	301	217	57	42
3	65	1,240	1,220	942	582	4,800	671	152	337	173	54	35
4	50	1,380	1,170	1,050	510	4,630	668	147	325	134	58	32
5	38	1,560	1,190	1,700	737	3,870	653	149	285	108	60	30
6	31	1,340	1,210	2,270	1,280	2,260	617	515	267	92	56	33
7	27	1,100	1,100	2,360	1,920	2,690	590	1,420	263	78	59	79
8	25	1,030	938	1,910	2,120	3,300	575	2,300	363	66	63	68
9	24	1,020	821	1,480	1,700	3,240	555	3,400	692	57	61	53
10	27	1,020	695	1,340	1,300	2,800	548	4,120	644	53	60	41
11	41	1,010	605	1,220	1,200	2,360	528	4,370	490	61	72	13
12	69	1,020	809	1,140	1,250	2,160	515	2,540	385	69	64	33
13	117	1,030	1,740	1,010	1,070	2,120	508	1,740	319	67	54	53
14	135	1,030	2,550	848	1,010	2,150	510	1,710	309	73	44	115
15	128	1,100	2,860	827	1,180	2,130	500	1,700	293	82	38	226
16	108	1,380	2,620	1,050	1,220	2,040	490	1,590	297	87	31	377
17	90	1,720	2,150	1,110	1,110	1,910	483	1,450	271	74	25	336
18	82	1,560	1,940	1,020	1,100	1,630	475	1,350	225	65	22	250
19	83	1,350	1,920	1,000	1,460	1,360	420	1,160	192	56	19	234
20	77	1,260	1,790	900	2,670	1,240	315	827	171	51	20	219
21	77	1,230	1,590	791	3,370	1,190	247	608	149	49	20	178
22	79	1,210	1,550	641	1,490	1,140	209	500	134	45	21	145
23	80	1,220	1,950	588	1,810	1,090	191	428	120	41	38	121
24	92	1,190	2,490	550	1,670	1,040	176	378	107	60	40	109
25	120	1,130	2,720	500	3,470	980	165	368	95	89	54	89
26	120	1,060	2,540	550	3,630	921	161	363	87	79	93	81
27	107	1,020	2,080	595	3,670	866	152	365	80	85	94	73
28	90	1,000	1,660	560	3,650	830	141	370	75	110	86	66
29	82	1,010	1,400	500	-----	800	138	360	108	105	79	62
30	110	1,080	1,290	450	-----	767	138	358	104	88	72	59
31	179	-----	1,240	450	-----	734	-----	349	-----	73	62	-----
TOTAL	2,538	34,588	50,298	31,652	47,289	66,068	12,714	35,377	7,821	2,654	1,639	3,329
MEAN	81.9	1,153	1,623	1,021	1,639	2,131	424	1,141	261	85.6	52.9	111
MAX	179	1,720	2,860	2,360	3,670	4,800	695	4,370	692	217	94	377
MIN	24	378	605	450	475	734	138	141	75	41	19	30

CAL YR 1970	TOTAL 348,262.0	MEAN 954	MAX 4,990	MIN 1.0
WTR YR 1971	TOTAL 295,967	MEAN 811	MAX 4,800	MIN 19

MUSKINGUM RIVER BASIN

03144000 Wakatomika Creek near Frazesburg, Ohio

LOCATION.--Lat 40°07'57", long 82°08'53", in NW 1/4 sec. 13, T.38., R.9W., Muskingum County, on right bank 2 miles northwest of Frazesburg, 2 miles downstream from Fivemile Run, and 2.5 miles upstream from Black Run.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--September 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 748.12 ft above mean sea level, adjustment of 1912. Prior to Oct. 31, 1936, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 147 cfs (14.26 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,960 cfs May 6 (gage height, 7.49 ft), minimum, 6.4 cfs Sept. 10, 11, 12.

Period of record: Maximum discharge, 13,700 cfs Jan. 22, 1959 (gage height, 13.15 ft), from rating curve extended above 7,700 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.0 cfs Oct. 3, 1963 (gage height, 0.94 ft).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1113: 1937(M). WSP 1555: 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	131	172	122	42	317	117	43	45	26	12	7.2
2	46	294	155	111	40	265	127	41	43	25	12	7.0
3	46	885	138	102	38	228	136	51	63	18	11	6.9
4	40	440	170	613	42	196	120	54	57	16	13	7.0
5	34	275	148	707	640	175	108	49	42	15	14	7.2
6	31	199	133	340	300	259	102	1,480	111	15	13	7.1
7	28	157	115	230	155	1,110	100	1,190	484	14	11	7.1
8	27	129	104	190	84	635	95	995	148	14	10	6.8
9	26	111	104	160	64	396	91	716	93	13	9.5	6.8
10	29	102	97	140	60	345	85	440	68	15	12	6.5
11	278	91	93	120	56	317	78	314	54	25	16	6.5
12	213	87	366	110	52	321	74	281	47	38	12	6.5
13	208	89	622	100	199	604	72	243	46	22	9.9	8.5
14	199	87	377	120	222	527	71	199	45	17	8.8	11
15	202	384	275	100	199	484	71	165	39	14	8.3	10
16	152	352	249	90	87	480	66	148	34	17	8.1	9.6
17	111	243	345	80	97	356	63	157	30	15	7.8	8.6
18	91	196	284	72	380	291	63	138	27	13	7.5	8.4
19	76	165	256	66	563	284	57	117	25	13	7.4	9.0
20	68	170	210	62	1,130	317	51	102	24	13	7.9	9.5
21	87	183	183	60	613	278	49	87	29	12	11	10
22	93	155	377	58	1,340	265	53	76	25	11	9.3	11
23	78	140	653	60	1,450	252	54	69	22	10	8.3	9.7
24	71	115	476	54	572	222	54	64	20	15	7.7	8.5
25	66	102	335	52	377	194	51	102	19	28	7.7	7.9
26	61	102	268	54	412	180	47	106	19	19	11	8.3
27	57	106	225	50	545	167	45	78	20	15	11	9.6
28	54	102	183	48	424	157	43	68	18	14	9.1	10
29	55	113	160	48	-----	152	49	61	47	13	8.2	9.3
30	115	196	143	46	-----	138	46	54	24	12	7.8	9.0
31	152	-----	131	44	-----	124	-----	50	-----	13	7.5	-----
TOTAL	2,848	5,901	7,547	4,209	10,183	10,036	2,238	7,738	1,768	520	309.8	250.5
MEAN	91.9	197	243	136	364	324	74.6	250	58.9	16.8	9.99	8.35
MAX	278	885	653	707	1,450	1,110	136	1,480	484	38	16	11
MIN	26	87	93	44	38	124	43	41	18	10	7.4	6.5
CFSM	.66	1.41	1.74	.97	2.60	2.31	.53	1.79	.42	.12	.07	.06
IN.	.76	1.57	2.01	1.12	2.71	2.67	.59	2.06	.47	.14	.08	.07
CAL YR 1970	TOTAL 71,600.9	MEAN 196	MAX 3,500	MIN 9.9	CFSM 1.40	IN 19.03						
WTR YR 1971	TOTAL 53,548.3	MEAN 147	MAX 1,480	MIN 6.5	CFSM 1.05	IN 14.23						

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	0130	6.66	2,360	5-6	2330	7.49	2,960

73

LOCATION.—Lat 40°07'13", long 81°59'59", Muskingum County, on left bank 70 ft downstream from bridge on State Highway 208, 0.5 mile east of Dresden, and 0.5 mile downstream from Wakatomika Creek.

PERIOD OF RECORD.--September 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 693.15 ft above mean sea level, adjustment of 1912. Prior to Aug. 24, 1925, nonrecording gage at about same site and datum.

AVERAGE DISCHARGE.--50 years, 6035 cfs.

EXTREMES.—Current year: Maximum discharge, 26,000 cfs Feb. 26 (gage height, 16.58 ft); minimum, 820 cfs Aug. 20.
Period of record: Maximum discharge, 100,000 cfs Aug. 9, 1935 (gage height, 31.6 ft); minimum, 335 cfs June 25, 1925.
Flood of March 1913 reached a stage of 46.0 ft, present site and datum, from floodmark (discharge, 228,000 cfs, computed by Corps of Engineers).

REMARKS.--Records good. Flow regulated by 15 flood-control reservoirs at points 15 to 105 miles upstream (see pp. 79-81). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1927(M). WSP 803: 1935. WSP 1385: 1922-23, 1928(M), 1929, 1930(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,950	3,780	7,890	6,040	2,100	25,000	6,270	2,210	2,880	1,630	1,200	1,030
2	1,720	4,930	8,770	5,450	2,090	25,300	5,960	2,170	2,640	1,630	1,160	977
3	1,520	7,890	8,130	4,780	2,260	24,300	6,210	2,230	2,760	1,470	1,120	966
4	1,420	9,300	7,630	6,190	2,380	22,600	6,140	2,210	2,780	1,330	1,100	955
5	1,350	9,540	9,300	11,600	4,390	21,000	5,510	2,200	2,660	1,230	1,140	933
6	1,230	8,940	9,650	13,600	9,330	16,200	5,040	8,010	2,580	1,150	1,150	911
7	1,160	7,790	8,550	11,700	9,980	19,000	4,780	18,000	3,800	1,110	1,130	999
8	1,110	6,590	7,150	9,080	10,400	21,800	4,610	20,500	4,920	1,080	1,110	999
9	1,080	5,530	6,420	7,550	9,960	20,400	4,360	22,400	4,270	1,060	1,080	977
10	1,100	4,930	5,850	6,780	6,990	18,200	4,170	21,700	3,600	1,100	1,040	966
11	1,620	4,660	5,540	6,190	5,890	16,500	3,940	19,600	3,200	1,160	1,120	933
12	2,330	4,520	6,740	5,670	5,470	14,600	3,780	16,200	2,760	2,080	1,190	890
13	2,300	4,360	12,900	5,260	5,290	16,000	3,670	13,800	2,540	3,240	1,160	911
14	3,080	4,170	15,500	5,060	5,670	19,800	3,640	12,700	2,550	2,480	1,090	1,180
15	4,440	5,260	15,400	5,440	5,600	20,600	3,760	11,000	2,510	1,860	1,020	2,090
16	3,970	7,730	14,500	5,890	5,330	20,500	3,750	9,820	2,450	1,600	966	2,300
17	3,540	9,490	13,600	5,440	4,900	19,700	3,570	8,790	2,280	1,470	933	1,980
18	2,920	9,080	12,800	4,710	6,000	17,900	3,490	8,290	2,090	1,400	890	1,630
19	2,510	7,850	12,000	4,390	9,300	16,000	3,380	7,410	1,930	1,290	870	1,510
20	2,270	6,990	11,100	4,070	17,300	14,600	3,200	6,120	1,800	1,200	850	1,460
21	2,070	6,610	9,670	3,830	21,200	14,100	3,000	5,260	1,690	1,190	890	1,430
22	2,060	6,480	9,140	3,750	23,800	13,400	2,910	4,700	1,590	1,230	911	1,640
23	2,120	6,150	11,800	3,730	23,800	12,700	2,820	4,180	1,540	1,200	1,010	1,580
24	2,230	5,620	13,700	3,540	23,800	12,000	2,720	3,760	1,520	1,210	1,050	1,410
25	2,230	5,180	13,200	3,490	25,300	10,400	2,580	3,670	1,430	1,490	999	1,250
26	2,100	4,830	11,300	3,400	26,000	9,470	2,450	3,920	1,390	1,660	1,100	1,230
27	1,930	4,700	9,320	3,180	25,800	8,760	2,350	4,000	1,350	1,630	1,600	1,220
28	1,710	4,640	8,070	2,580	25,500	8,470	2,330	3,860	1,310	1,510	1,710	1,220
29	1,640	4,730	7,210	2,050	-----	8,190	2,310	3,570	1,520	1,410	1,730	1,160
30	1,810	5,490	6,840	2,400	-----	7,510	2,280	3,330	1,430	1,330	1,330	1,120
31	2,560	-----	6,360	2,400	-----	6,880	-----	3,100	-----	1,250	1,120	-----
TOTAL	65,080	187,760	306,070	169,240	325,830	501,880	114,980	258,710	71,770	45,680	34,769	37,857
MEAN	2,099	6,259	9,873	5,459	11,640	16,190	3,833	8,345	2,392	1,474	1,122	1,262
MAX	4,440	9,540	15,500	13,600	26,000	25,300	6,270	22,400	4,920	3,240	1,730	2,300
MIN	1,080	3,780	5,540	2,050	2,090	6,880	2,280	2,170	1,310	1,060	850	890
CAL YR 1970	TOTAL	2,493,000		MEAN	6,830	MAX	25,200	MIN	1,030			
WTR YR 1971	TOTAL	2,119,626		MEAN	5,807	MAX	26,000	MIN	850			

MUSKINGUM RIVER BASIN

03145000 South Fork Licking River near Hebron, Ohio

LOCATION.--Lat 39°59'19", long 82°28'30", in NW 1/4 sec. 3, T.1N., R.12W., Licking County, near center span on downstream side of bridge on county road, 800 ft downstream from Beaver Run, 2.3 miles north of Hebron, and 2.5 miles upstream from Ramp Creek.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--October 1939 to September 1948, July 1968 to current year.

GAGE.--Nonrecording gage. Datum of gage is 856.08 ft above mean sea level. October 1939 to September 1948 at same site at datum 1.08 ft lower.

AVERAGE DISCHARGE.--12 years, 130 cfs.

EXTREMES.--Current year: Maximum discharge, 1,760 cfs Feb. 22 (gage height 8.92 ft); minimum daily 4.0 cfs Sept. 25.

Period of record: Maximum discharge, 4,120 cfs Mar. 6, 1945 (gage height 12.1 ft, from flood marks); no flow Aug. 22, 1942.

REMARKS.--Records fair. Occasional regulation by Buckeye Lake (capacity 27,300 acre-feet) on unnamed tributary 5.6 miles upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 923: 1940. WSP 1033: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	38	595	38	19	534	46	16	21	26	19	6.8
2	14	83	555	35	19	149	70	16	19	25.8	16	6.2
3	13	661	526	38	19	101	92	20	29	77	14	4.8
4	10	340	542	734	80	85	65	24	26	43	74	5.4
5	10	265	528	912	905	81	50	20	20	20	21	5.1
6	10	232	502	300	581	146	49	107	18	14	20	6.0
7	9.6	205	300	160	110	1,180	45	178	17	18	18	5.7
8	9.6	192	45	90	70	477	43	778	16	13	18	7.2
9	8.9	160	38	60	55	158	39	318	12	8.9	10	5.4
10	9.6	32	36	50	48	137	35	471	10	9.2	12	5.4
11	24	20	36	43	42	127	32	288	10	10	11	5.4
12	65	18	468	38	40	149	31	86	9.2	17	7.5	4.8
13	29	17	735	36	42	498	31	69	8.9	17	6.0	5.4
14	36	18	291	64	50	306	31	56	12	11	6.0	10
15	88	307	522	56	46	343	30	45	12	7.8	5.7	8.9
16	76	193	492	46	42	524	29	40	10	58	5.7	7.2
17	45	105	652	40	40	510	27	44	8.9	43	5.7	6.8
18	48	182	483	34	700	388	27	87	7.8	18	5.7	6.0
19	174	178	140	30	800	141	26	52	7.2	10	5.7	5.4
20	142	245	99	28	861	175	24	38	6.2	9.2	5.7	5.4
21	63	386	85	26	410	134	26	31	6.8	8.2	7.5	6.0
22	22	346	319	25	977	121	23	26	12	8.9	8.2	5.4
23	30	326	519	24	1,420	113	25	22	12	7.2	6.8	6.0
24	27	205	370	23	610	92	20	21	9.6	35	7.8	4.8
25	21	202	404	22	650	80	17	33	11	474	7.8	4.0
26	19	178	378	21	711	75	17	55	116	126	54	7.2
27	17	178	75	20	936	69	17	48	104	57	32	11
28	16	187	55	20	705	65	19	36	39	35	14	14
29	16	539	50	20	-----	61	19	31	36	22	10	9.6
30	22	608	45	20	-----	53	17	27	53	22	7.2	7.9
31	40	-----	42	20	-----	48	-----	24	-----	19	7.2	-----
TOTAL	1,130.7	6,646	9,927	3,073	10,988	7,120	1,022	3,107	679.6	1,502.4	449.2	199.1
MEAN	36.5	222	320	99.1	352	230	34.1	100	22.7	48.5	14.5	6.64
MAX	174	661	735	912	1,420	1,180	92	778	116	474	74	14
MIN	8.9	17	36	20	19	48	17	16	6.2	7.2	5.7	4.0

CAL YR 1970 TOTAL 71,440.9 MEAN 196 MAX 3,600 MIN 4.6
WTR YR 1971 TOTAL 45,844.0 MEAN 126 MAX 1,420 MIN 4.0

MUSKINGUM RIVER BASIN

75

03146000 North Fork Licking River at Utica, Ohio

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4N., R.12W., Licking County, on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mile downstream from unnamed right bank tributary, and 2 miles upstream from Lake Fork.

DRAINAGE AREA.--116 sq mi.

PERIOD OF RECORD.--October 1939 to September 1948, October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 934 ft (from topographic map). Prior to September 30, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 119 cfs (13.93 inches per year).

EXTREMES.--Current year: Maximum discharge 3,320 cfs May 6 (gage height 8.59 ft); minimum 1.7 cfs Sept. 25.
Period of record: Maximum discharge 6,750 cfs Jan. 29, 1970 (gage height 12.72 ft); minimum observed, 0.6 cfs Aug. 13, Oct. 2, 1944.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	13	45	38	19	208	51	18	19	8.1	5.6	2.4
2	9.8	53	35	36	18	176	103	19	18	7.4	5.0	2.6
3	12	149	33	34	18	142	101	26	24	7.0	5.3	2.6
4	9.8	70	67	548	65	90	72	26	21	6.7	5.8	3.2
5	9.1	44	66	400	1,220	80	61	23	17	6.4	7.4	3.0
6	8.8	32	49	120	270	170	56	1,760	138	6.7	6.1	2.8
7	8.4	26	35	90	110	845	51	619	335	5.8	5.3	2.2
8	8.4	20	29	70	60	230	44	1,040	105	5.8	4.8	2.4
9	8.1	18	27	54	45	140	39	386	56	6.4	4.5	2.1
10	9.1	16	26	44	40	160	35	208	37	7.0	4.3	1.9
11	9.8	15	26	40	38	142	31	133	27	12	4.8	1.9
12	10	14	380	38	56	249	30	111	22	17	4.5	1.9
13	13	15	455	36	186	946	29	89	20	12	4.3	3.2
14	16	17	229	54	120	438	33	71	19	8.8	4.3	4.3
15	20	70	136	60	75	490	32	58	18	7.0	4.0	3.0
16	16	61	108	40	52	370	29	59	15	7.0	4.0	2.4
17	13	42	186	34	170	229	28	76	13	6.7	3.4	2.4
18	12	32	160	30	570	183	28	49	12	6.4	3.2	2.4
19	11	26	118	26	600	208	26	39	11	6.7	3.2	2.1
20	11	29	93	24	1,170	247	24	34	10	6.4	3.2	3.9
21	12	34	76	24	406	190	23	30	9.8	5.8	3.6	6.1
22	13	30	384	24	1,700	186	26	26	9.1	5.3	3.4	4.0
23	12	25	565	23	1,230	147	25	24	8.8	5.3	3.2	3.0
24	12	19	260	23	338	111	22	22	8.4	9.1	2.8	2.2
25	12	18	120	23	240	93	20	43	7.7	10	3.6	1.9
26	12	17	80	23	426	87	19	58	8.1	9.1	3.8	2.6
27	11	18	64	22	585	78	18	43	7.7	7.4	3.8	3.2
28	10	19	56	22	365	74	19	34	7.7	6.4	3.6	2.6
29	12	22	50	21	-----	69	21	30	7.4	6.4	3.2	2.2
30	15	43	46	21	-----	60	20	26	7.0	5.8	3.2	2.6
31	14	-----	42	20	-----	53	-----	22	-----	5.8	2.8	-----
TOTAL	360.1	1,007	4,046	2,062	10,082	6,891	1,116	5,202	1,018.7	233.7	130.0	83.1
MEAN	11.6	33.6	131	66.5	360	222	37.2	168	34.0	7.54	4.19	2.77
MAX	20	149	565	548	1,700	946	103	1,760	335	17	7.4	6.1
MIN	8.1	13	26	20	18	53	18	18	7.0	5.3	2.8	1.9
CFSM	.10	.29	1.13	.57	3.10	1.91	.32	1.45	.29	.07	.04	.02
IN.	.12	.32	1.30	.66	3.23	2.21	.36	1.67	.33	.07	.04	.03
CAL YR 1970	TOTAL 48,402.4	MEAN 133	MAX 4,600	MIN 3.8	CFSM 1.15	IN 15.52						
WTR YR 1971	TOTAL 32,231.6	MEAN 88.3	MAX 1,760	MIN 1.9	CFSM .76	IN 10.34						

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1900	7.69	2,600	5-6	1530	8.59	3,320

MUSKINGUM RIVER BASIN

03146500 Licking River near Newark, Ohio

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 1/4 T.2N., R.11W., Licking County, on right bank at downstream side of Stadden Bridge, 1 mile downstream from Shawnee Run, 1.5 miles upstream from Equality Run, and 3.5 miles east of Newark.

DRAINAGE AREA.--537 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 779.02 ft above mean sea level. Prior to May 9, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 546 cfs.

EXTREME.--Current year: Maximum discharge, 6,290 cfs Feb. 23 (gage height, 9.74 ft); minimum, 57 cfs Sept. 11, 13. Period of record: Maximum discharge, 45,000 cfs Jan. 21, 1959 (gage height, 20.3 ft, from high-water mark), from rating curve extended above 24,000 cfs on basis of flood-routing studies from station at Toboso; minimum, 15 cfs Jan. 12, 1954, result of freezeup.

REMARKS.--Records good. Occasional regulation by Buckeye Lake (capacity, 27,300 acre-ft) on South Fork 15.2 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 973: 1940(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	169	887	320	140	1,350	360	147	154	187	88	65
2	84	468	804	300	130	980	516	151	147	360	88	63
3	77	1,560	751	280	120	800	600	179	247	175	88	62
4	72	868	837	2,160	387	640	462	179	183	116	102	62
5	72	652	850	2,450	3,050	600	398	168	154	103	90	61
6	68	539	763	1,070	1,500	973	365	2,000	714	98	87	61
7	68	468	639	722	705	3,940	343	1,940	1,480	90	84	63
8	68	418	306	430	447	1,880	316	3,310	546	93	78	61
9	68	380	266	360	322	1,020	290	1,850	327	90	76	61
10	75	244	255	330	290	938	265	1,230	242	98	89	61
11	125	200	256	380	250	847	247	945	199	119	81	60
12	103	191	1,350	280	260	994	242	642	172	103	74	60
13	122	187	2,130	280	948	2,450	238	528	172	105	72	71
14	128	215	1,150	386	755	1,780	238	432	172	93	69	79
15	180	897	1,010	450	506	1,750	233	360	158	85	67	70
16	176	766	963	330	363	1,960	220	332	144	172	67	72
17	125	505	1,340	290	575	1,430	211	438	131	137	67	67
18	110	484	1,160	220	1,940	1,210	207	393	122	98	66	63
19	110	460	725	200	2,190	959	199	290	113	90	65	63
20	190	483	577	190	3,410	1,110	187	256	110	85	80	87
21	169	670	503	190	1,790	924	187	220	108	81	71	65
22	150	621	1,280	180	3,820	861	191	199	105	81	69	67
23	150	566	2,120	180	4,790	792	183	183	105	77	68	64
24	144	400	1,300	180	1,930	696	175	179	103	310	65	62
25	138	350	1,000	180	1,460	612	165	305	103	726	66	60
26	131	350	750	170	1,670	558	161	349	158	300	95	76
27	128	371	550	160	2,190	510	154	260	207	158	93	71
28	125	418	460	160	1,680	474	172	220	131	119	74	68
29	138	616	410	150	-----	450	158	191	191	108	69	73
30	157	927	370	150	-----	409	158	175	147	98	66	86
31	169	-----	340	140	-----	371	-----	165	-----	93	66	-----
TOTAL	3,711	15,443	26,102	13,188	37,638	34,268	7,841	18,216	7,045	4,648	2,380	1,984
MEAN	120	515	842	425	1,344	1,105	261	588	235	150	76.8	66.1
MAX	190	1,560	2,130	2,450	4,790	3,940	600	3,310	1,480	726	102	86
MIN	68	169	255	140	120	371	154	147	103	77	65	60

CAL YR 1970 TOTAL 268,422 MEAN 735 MAX 9,990 MIN 68
WTR YR 1971 TOTAL 172,464 MEAN 473 MAX 4,790 MIN 60

PEAK DISCHARGE (BASE, 500 CFS).--No peaks above base.

03147500 Licking River below Dillon Dam, near Dillon Falls, Ohio

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1N., R.8W., Muskingum County, on left bank 500 ft downstream from Dillon Dam, 2 miles northwest of Dillon Falls, and 5.8 miles upstream from mouth.

DRAINAGE AREA.--742 sq mi.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1962, published as Licking River at Dillon.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft above mean sea level (Corps of Engineers bench mark). Prior to Oct. 27, 1940, water-stage recorder at site 2.3 miles downstream at different datum. Oct. 27, 1940, to Sept. 30, 1962, water-stage recorder at site 2.6 miles downstream at datum 16.3 ft lower.

AVERAGE DISCHARGE.--32 years, 760 cfs.

EXTREMES.--Current year: Maximum discharge, 4,230 cfs May 9 (gage height, 9.24 ft); minimum, 29 cfs Sept. 23 (result of gate operation at dam).

Period of record: Maximum discharge, 47,000 cfs Jan. 22, 1959 (gage height, 32.46 ft, datum then in use), from rating curve extended above 30,000 cfs on basis of slope-area measurement of peak flow; minimum daily, 19 cfs Dec. 22, 1960.

Flood of March 1913 reached a stage of 37.0 ft, site and datum in use 1940-62, from floodmark (backwater from Muskingum River).

REMARKS.--Records good. Flow regulated by Dillon Reservoir since December 1960 (see Station No. 03147300). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio, 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	361	1,220	523	518	3,900	519	62	230	173	118	90
2	140	311	1,160	415	605	3,930	620	62	230	324	101	91
3	175	886	957	402	572	3,870	807	61	309	478	101	84
4	189	1,340	949	1,310	655	3,800	698	60	409	166	136	80
5	163	1,330	993	2,760	1,680	3,640	520	61	296	129	165	80
6	143	1,310	959	2,960	2,770	2,400	576	313	233	129	132	80
7	143	1,220	855	2,620	2,660	2,100	465	2,710	1,610	129	102	80
8	144	767	572	1,140	2,450	3,070	223	2,120	2,010	129	103	78
9	147	540	386	740	1,260	3,410	152	4,120	590	128	103	78
10	145	495	368	790	572	3,180	141	4,070	344	154	121	76
11	271	356	338	586	640	2,870	145	2,970	368	184	164	76
12	551	272	499	559	685	2,040	145	1,250	312	199	133	76
13	415	241	683	500	994	2,480	128	811	238	144	103	74
14	401	302	1,200	586	1,280	3,180	109	601	235	136	101	79
15	503	414	2,420	710	1,130	2,710	111	684	237	138	100	93
16	504	765	3,250	665	808	3,090	110	440	238	139	98	101
17	377	1,220	2,940	514	645	2,640	111	652	237	189	96	119
18	324	1,290	2,480	437	1,670	1,730	111	695	219	206	96	97
19	307	987	1,490	398	2,540	1,340	111	393	186	177	94	85
20	350	866	720	378	3,030	1,530	113	355	154	139	92	84
21	410	913	735	362	3,240	1,370	113	412	139	94	91	80
22	361	939	1,230	342	1,420	1,210	117	372	139	92	92	87
23	196	883	2,560	342	518	1,140	114	288	139	92	90	85
24	183	745	2,640	342	2,430	978	109	258	138	154	91	84
25	237	645	2,060	346	3,760	858	104	465	156	758	91	72
26	237	612	1,660	334	4,000	796	87	572	185	759	89	62
27	201	629	1,130	280	3,950	751	65	398	247	230	108	83
28	203	635	730	213	3,900	699	61	274	248	148	128	94
29	204	749	586	235	-----	683	60	280	334	156	119	94
30	280	1,100	605	262	-----	595	61	290	280	163	97	95
31	386	-----	586	255	-----	548	-----	259	-----	155	93	-----
TOTAL	8,497	23,123	38,961	22,306	50,382	66,538	6,806	26,358	10,690	6,396	3,348	2,537
MEAN	274	771	1,257	720	1,799	2,146	227	850	356	206	108	84.6
MAX	551	1,340	3,250	2,960	4,000	3,930	807	4,120	2,010	759	165	119
MIN	140	241	338	213	518	548	60	60	138	92	89	62

CAL YR 1970 TOTAL 370,524 MEAN 1,015 MAX 5,040 MIN 83
WTR YR 1971 TOTAL 265,942 MEAN 729 MAX 4,120 MIN 60

MUSKINGUM RIVER BASIN

03150000 Muskingum River at McConnellsville, Ohio

LOCATION.--Lat 39°38'42", long 81°51'00", in SE 1/4 sec. 11, T.10N., R.12W., Morgan County, on left bank just upstream from Dam 7, at McConnellsville, and 3.5 miles downstream from Oilspring Run.

DRAINAGE AREA.--7,422 sq mi.

PERIOD OF RECORD.--October 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 650.31 ft above mean sea level, adjustment of 1912. Prior to July 27, 1922, nonrecording gage at site 0.5 mile upstream at same datum. July 27, 1922, to Aug. 10, 1926, nonrecording gage and Aug. 11, 1926, to Sept. 8, 1959, water-stage recorder at present site and datum. Sept. 9, 1959, to July 18, 1960, nonrecording gage at site 0.5 mile upstream at same datum.

AVERAGE DISCHARGE.--50 years, 7,137 cfs.

EXTREMES.--Current year: Maximum discharge, about 38,700 cfs Feb. 22; minimum, 750 cfs Aug. 20 (gage height, 1.27 ft).
Period of record: Maximum discharge, 126,000 cfs Jan. 26, 1937 (gage height, 21.14 ft); minimum, 218 cfs Aug. 25, 1930 (gage height, -0.65 ft) from rating curve extended below 470 cfs.
Flood of Mar. 27, 1913 reached a stage of 33.5 ft (discharge, 270,000 cfs, computed by Corps of Engineers).

REMARKS.--Records good. Flow regulated by 16 flood-control reservoirs 36.6 to 148 miles upstream from station (see pp. 79-83). Some regulation at low flow by powerplant 19 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 783: 1913(M). WSP 853: 1933(M). WSP 1173: 1922-24, 1926(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,360	3,880	8,160	6,810	2,460	31,000	6,840	2,400	3,300	1,930	1,330	1,110
2	2,030	5,040	9,800	6,240	2,440	32,000	6,690	2,420	3,000	2,080	1,210	977
3	1,880	9,000	9,350	5,580	2,400	31,000	6,600	2,420	3,100	2,210	1,230	933
4	1,760	10,800	8,790	8,340	3,300	28,000	6,630	2,400	3,300	1,940	1,200	922
5	1,640	11,100	9,630	15,000	10,000	25,000	6,330	2,360	3,100	1,600	1,210	911
6	1,520	10,700	12,000	18,000	12,000	23,000	5,790	7,320	3,000	1,520	1,210	878
7	1,430	9,380	9,880	16,000	13,500	21,000	5,460	20,000	5,600	1,400	1,080	944
8	1,340	7,950	8,370	11,700	14,000	26,000	4,980	26,000	7,200	1,230	1,060	989
9	1,260	6,450	7,040	9,070	12,000	24,700	4,620	28,000	5,790	1,250	1,030	922
10	1,370	5,760	6,540	8,200	8,800	22,400	4,400	26,000	4,400	1,270	1,010	856
11	1,750	5,220	6,150	7,260	7,000	20,600	4,200	24,000	3,800	1,330	1,170	867
12	2,700	4,890	8,650	6,600	6,200	18,200	4,050	18,800	3,400	1,660	1,230	823
13	2,880	4,740	12,800	6,000	6,600	18,200	3,920	15,800	3,100	2,960	1,210	988
14	2,960	4,500	16,200	5,800	7,000	22,200	3,780	13,700	3,000	2,990	1,110	1,200
15	4,500	6,300	18,000	6,000	6,600	23,800	3,750	12,600	3,000	2,300	1,000	1,610
16	4,740	7,780	19,000	6,800	6,200	23,800	3,850	11,000	2,900	2,000	933	2,360
17	4,080	10,400	17,000	6,200	6,000	22,900	3,720	10,300	2,800	1,750	889	2,250
18	3,520	10,900	15,500	5,600	5,000	20,300	3,650	9,240	2,600	1,680	856	1,960
19	2,960	9,280	14,400	5,000	12,800	18,300	3,600	8,480	2,400	1,600	801	1,670
20	2,730	8,060	13,100	4,600	21,000	16,600	3,450	7,110	2,200	1,490	801	1,580
21	2,660	7,780	11,400	4,400	25,000	15,900	3,240	6,300	2,100	1,300	867	1,540
22	2,640	7,530	11,100	4,300	32,000	14,900	3,140	5,580	2,000	1,250	856	1,620
23	2,460	7,220	14,000	4,200	31,000	14,000	3,030	4,920	1,900	1,260	900	1,730
24	2,360	6,600	17,500	4,100	27,000	13,400	2,940	4,400	1,800	1,330	1,020	1,660
25	2,480	6,000	16,200	4,000	29,000	11,800	2,790	4,180	1,700	1,960	1,010	1,430
26	2,440	5,610	14,200	3,800	31,000	10,500	2,700	4,400	1,700	2,680	1,220	1,360
27	2,270	5,490	11,800	3,650	32,000	9,660	2,600	4,600	1,700	2,080	1,370	1,370
28	2,080	5,430	9,740	3,080	32,000	9,180	2,640	4,400	1,800	1,780	1,800	1,360
29	2,010	5,520	8,400	2,620	-----	8,900	2,540	4,100	2,070	1,670	1,810	1,330
30	2,750	6,450	7,840	2,500	-----	8,260	2,500	3,900	2,140	1,550	1,640	1,250
31	3,380	-----	7,360	2,480	-----	7,530	-----	3,600	-----	1,460	1,300	-----
TOTAL	76,940	215,760	359,900	204,060	408,300	593,030	124,430	300,730	89,900	54,510	35,363	39,399
MEAN	2,482	7,192	11,610	6,583	14,560	19,130	4,148	9,701	2,997	1,758	1,141	1,313
MAX	4,740	11,100	19,000	18,000	32,000	32,000	6,840	28,000	7,200	2,990	1,810	2,360
MIN	1,260	3,880	6,150	2,480	2,400	7,530	2,500	2,360	1,700	1,230	801	823

CAL YR 1970 TOTAL 2,977,900 MEAN 8,159 MAX 31,000 MIN 1,180
WTR YR 1971 TOTAL 2,502,322 MEAN 6,856 MAX 32,000 MIN 801

Reservoirs in Muskingum River basin

- 03119500 BOLIVAR RESERVOIR.**--Lat 40°38'56", long 81°25'57", Tuscarawas County, in gate house of dam on Sandy Creek, 1.1 miles east of Bolivar. Drainage area, 504 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 895.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 44,410 acre-ft Feb. 26 (elevation, 937.70 ft); minimum, 93 acre-ft several days in Aug. and Sept. (elevation, 896.80 ft). Extremes for period of record: Maximum contents, 63,320 acre-ft Jan. 26, 1959 (elevation, 944.01 ft); minimum, 62 acre-ft Oct. 9, 1933 (elevation, 896.30 ft). Reservoir is formed by earthfill dam completed Nov. 15, 1937. Usable capacity 149,500 acre-ft between elevations 895.0 ft (lowest outlet) and 962.0 ft (crest of spillway). Dead storage below elevation 895.0 ft, 113 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03120000 LEESVILLE RESERVOIR.**--Lat 40°28'15", long 81°11'40", in E 1/4 sec. 36, T.13N., R.6W., Carroll County, in gate house of dam on McGuire Creek, 1.4 miles northeast of Leesville. Drainage area, 48.3 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 928.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 21,780 acre-ft May 10 (elevation, 965.51 ft); minimum, 13,500 acre-ft Feb. 12 (elevation, 956.78 ft). Extremes for period of record: Maximum contents, 26,430 acre-ft Apr. 17, 1948 (elevation, 969.59 ft); minimum, 41 acre-ft Oct. 9-25, 1939 (elevation, 928.38 ft), but may have been less during period Sept. 18-24, 1940. Reservoir is formed by earthfill dam completed Oct. 22, 1937. Usable capacity 37,070 acre-ft between elevations 928.0 ft (lowest outlet) and 977.5 ft (crest of spillway), of which 19,170 acre-ft is in the conservation pool. Dead storage below elevation 928.0 ft, 329 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduit through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03121000 ATWOOD RESERVOIR.**--Lat 40°31'34", long 81°17'09", in SE 1/4 sec. 28, T.15N., R.7W., Tuscarawas County, in gate house of dam on Indian Fork, 1.5 miles southeast of New Cumberland. Drainage area, 69.9 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 890.0 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Oct. 11, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 26,760 acre-ft Mar. 15 (elevation, 929.98 ft); minimum, 15,870 acre-ft Feb. 17 (elevation, 922.40 ft). Extremes for period of record: Maximum contents, 35,210 acre-ft Feb. 8, 1952 (elevation, 934.51 ft); minimum, 2.2 acre-ft Jan. 8, 9, 1940 (elevation, 890.36 ft). Reservoir is formed by earthfill dam completed Sept. 23, 1937. Usable capacity 49,690 acre-ft between elevations 890.0 ft (lowest outlet) and 941.0 ft (crest of spillway), of which 23,590 acre-ft is in the conservation pool. Dead storage below elevation 890.0 ft, 8 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03122000 DOVER RESERVOIR.**--Lat 40°33'29", long 81°24'46", in SW 1/4 sec. 6, T.9N., R.1W., Tuscarawas County, in gate house of dam on Tuscarawas River, 4.2 miles northeast of Dover. Drainage area, 1,404 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 858.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 22, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 14,900 acre-ft Feb. 24 (elevation, 885.50 ft); no contents several days in Aug. and Sept. Extremes for period of record: Maximum contents, 109,000 acre-ft July 12, 1969 (elevation, 905.00 ft); no contents several days during most years. Reservoir is formed by concrete dam completed Nov. 29, 1937. Usable capacity 203,000 acre-ft between elevations 862.0 ft (lowest outlet) and 916.0 ft (crest of spillway), of which 1,000 acre-ft is in conservation pool. No dead storage. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03123500 BEACH CITY RESERVOIR.**--Lat 40°38'06", long 81°33'30", in T.10N., R.3W., Tuscarawas County, in gate house of dam on Sugar Creek, 1.6 miles southeast of Beach City. Drainage area, 300 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 931.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Feb. 4, 1939, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 18,060 acre-ft Feb. 24 (elevation, 962.60 ft); minimum, 1,810 acre-ft several days in Aug. (elevation, 948.24 ft). Extremes for period of record: Maximum contents, 70,120 acre-ft July 6, 1969 (elevation, 976.25 ft); minimum, 1.1 acre-ft several days in September and October 1939 (elevation, 931.60 ft). Reservoir is formed by earthfill dam completed Aug. 13, 1937. Usable capacity 71,650 acre-ft (revised) between elevations 931.0 ft (lowest outlet) and 976.5 ft (crest of spillway), of which 1,700 acre-ft is in conservation pool. No dead storage. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03125500 PIEDMONT RESERVOIR.**--Lat 40°11'31", long 81°12'57", in SE 1/4 sec. 35, T.10N., R.6W., Harrison County, in gate house of dam on Stillwater Creek, 0.4 mile west of Piedmont. Drainage area, 85.9 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 881.75 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 37,900 acre-ft May 10 (elevation, 914.89 ft); minimum, 24,950 acre-ft Feb. 12 (elevation, 908.96 ft). Extremes for period of record: Maximum contents, 46,650 acre-ft June 11, 12, 1947 (elevation, 918.33 ft); minimum, 26 acre-ft Sept. 18-25, 1939 (elevation, 882.25 ft). Reservoir is formed by earthfill dam completed May 22, 1937. Usable capacity 64,990 acre-ft between elevations 881.75 ft (lowest outlet) and 924.6 ft (crest of spillway), of which 33,500 acre-ft is in the conservation pool. Dead storage below elevation 881.75 ft, 71 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03126500 CLENDENING RESERVOIR.**--Lat 40°16'10", long 81°16'43", in NW 1/4 sec. 16, T.12N., R.7W., Harrison County, in gate house of dam on Brushy Fork 0.6 mile east of Tippencanoe. Drainage area, 69.3 sq mi. Period of record, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 862.00 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to July 11, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 29,700 acre-ft May 10 (elevation, 899.70 ft); minimum, 18,050 acre-ft Dec. 19 (elevation, 892.70 ft). Extremes for period of record: Maximum contents, 38,060 acre-ft Feb. 7, 1952 (elevation, 903.85 ft); minimum, 5.9 acre-ft Nov. 4, 1938 (elevation, 862.33 ft). Reservoir is formed by earthfill dam completed Nov. 1, 1937. Usable capacity 53,970 acre-ft between elevations 862.0 ft (lowest outlet) and 910.5 ft (crest of spillway), of which 26,470 acre-ft is in the conservation pool. Dead storage below elevation 862.0 ft, 27 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

Reservoirs in Muskingum River basin--Continued

- 03128000 TAPPAN RESERVOIR.**--Lat 40°21'24", long 81°13'38", in NW 1/4 sec. 4, T.13N., R.7W., Harrison County, in gate house of dam on Little Stillwater Creek, 0.9 mile west of Tappan. Drainage area, 71.1 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 870.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: maximum contents, 38,960 acre-ft May 10 (elevation, 900.92 ft); minimum, 25,050 acre-ft Feb. 4 (elevation, 894.70 ft). Extremes for period of record: Maximum contents, 48,440 acre-ft Feb. 5, 6, 1952 (elevation, 904.53 ft); no contents Sept. 29, 1939.
- Reservoir is formed by earthfill dam completed Oct. 24, 1936. Usable capacity 61,500 acre-ft between elevations 870.0 ft (lowest outlet) and 909.0 ft (crest of spillway), of which 35,070 acre-ft is in conservation pool. Dead storage below elevation 870.0 ft, 46 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03129500 CHARLES MILL RESERVOIR.**--Lat 40°44'26", long 82°21'47", in NE 1/4 sec. 35, T.23N., R.17W., Ashland County, in gate house of dam on Black Fork, 2.5 miles south of Mifflin. Drainage area, 215 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 987.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 17,490 acre-ft Feb. 26 (elevation, 1,003.00 ft); minimum, 2,310 acre-ft Feb. 3 (elevation, 992.64 ft). Extremes for period of record: Maximum contents, 53,480 acre-ft Jan. 25, 1959 (elevation, 1,013.53 ft); minimum, 733 acre-ft Dec. 24, 1965 (elevation, 989.89 ft).
- Reservoir is formed by earthfill dam completed Aug. 17, 1936. Usable capacity 87,690 acre-ft between elevations 987.0 ft (lowest outlet) and 1,020.0 ft (crest of spillway) of which 7,090 acre-ft is in the conservation pool. Dead storage below elevation 987.0 ft, 310 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam or through bypass gate around conservation weir. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03133000 PLEASANT HILL RESERVOIR.**--Lat 40°37'26", long 82°19'33", in NE 1/4 sec. 7, T.19N., R.16W., Ashland County, in gate house of dam on Clear Fork, 2.5 miles south of Perrysville. Drainage area, 197 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 971.75 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 19,520 acre-ft May 9 (elevation, 1,026.37 ft); minimum, 7,860 acre-ft Dec. 26 (elevation, 1,012.22 ft). Extremes for period of record: Maximum contents, 43,530 acre-ft Jan. 23, 1959 (elevation, 1,044.01 ft); minimum, 74 acre-ft May 8, 1938 (elevation, 976.63 ft).
- Reservoir is formed by earthfill dam completed Feb. 1, 1938. Usable capacity 87,640 acre-ft between elevations 971.75 ft (lowest outlet) and 1,065.0 ft (crest of spillway), of which 13,510 acre-ft is in the conservation pool. Dead storage below elevation 971.75 ft, 12 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03134500 MOHICANVILLE RESERVOIR.**--Lat 40°43'28", long 82°09'08", in SE 1/4 sec. 34, T.21N., R.15W., Ashland County, in gate house of dam on Lake Fork, 2 miles east of Mohicanville. Drainage area, 271 sq mi. Period of record, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 932.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 14,780 acre-ft Feb. 24 (elevation, 948.50 ft); minimum, 28 acre-ft Aug. 31 and Sept. 6 (elevation, 933.06 ft). Extremes for period of record: Maximum contents, 96,330 acre-ft July 7, 1969 (elevation, 962.55 ft); minimum, 9.9 acre-ft several days in 1941, 1944, 1945; minimum elevation, 932.38 ft several days in August, September, October, 1941.
- Reservoir is formed by earthfill dam completed Dec. 24, 1936. Usable contents 102,000 acre-ft between elevations 932.0 ft (lowest outlet) and 963.0 ft (crest of spillway). Dead storage below elevation 932.0 ft, 18 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03138000 MOHAWK RESERVOIR.**--Lat 40°21'12", long 82°05'12", in SW 1/4 sec. 6, T.6N., R.6W., Coshocton County, in gate house of dam on Walhonding River, 1.5 miles northwest of Nellie. Drainage area, 1,504 sq mi. Period of record, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 799.2 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 40,950 acre-ft Feb. 24 (elevation, 842.53 ft); minimum, 57 acre-ft Sept. 11 (elevation, 800.64 ft). Extremes for period of record: Maximum contents, 176,000 acre-ft Jan. 25, 1959 (elevation, 873.94 ft); minimum, 44 acre-ft Sept. 21, Oct. 4, 1955; minimum elevation, 800.35 ft Oct. 4, 1955, from graph based on gage readings.
- Reservoir is formed by earthfill dam completed Sept. 22, 1937. Usable capacity 284,900 acre-ft between elevations 799.2 ft (lowest outlet) and 890.0 ft (crest of spillway). Dead storage below elevation 799.2 ft, 59 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in tunnels through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03141000 SENECAVILLE RESERVOIR.**--Lat 39°55'31", long 81°26'06", Guernsey County, in gate house of dam on Seneca Fork, 1.5 miles southeast of Senecaville. Drainage area, 118 sq mi. Period of record, June 1934 to current year. Month-end contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 812.05 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 21, 1938, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 47,880 acre-ft Nov. 6 (elevation, 833.98 ft); minimum, 28,200 acre-ft Feb. 1 (elevation, 828.10 ft). Extremes for period of record: Maximum contents, 61,430 acre-ft Mar. 24, 1945 (elevation, 837.27 ft); minimum, 360 acre-ft Oct. 22, 23, 1939 (elevation, 812.53 ft).
- Reservoir is formed by earthfill dam completed May 14, 1937. Usable capacity 86,340 acre-ft between elevations 812.05 ft (lowest outlet) and 842.5 ft (top of taintor gates), of which 41,300 acre-ft is in conservation pool. Usable capacity at elevation, 831.0 ft (crest of spillway), 37,180 acre-ft. Dead storage below elevation 812.05 ft, 1,000 acre-ft. Figures given herein represent usable contents. Taintor gates normally remain closed to maintain conservation pool at elevation 832.2 ft and outflow is controlled by gates on conduits through dam. Reservoir is used for flood control and conservation. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03142290 SALT FORK RESERVOIR.**--Lat 40°06'15", long 81°33'15", in T.3N., R.3W., Guernsey County, at outlet works near left end of dam on Salt Fork, 0.8 mile upstream from mouth, and 5.0 miles north of Cambridge. Drainage area, 159 sq mi. Period of record, September 1968 to current year. Water-stage recorder. Datum of gage is 700.00 ft above mean sea level; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 46,170 acre-ft May 18 (elevation, 801.35 ft); minimum, 23,250 acre-ft Feb. 17 (elevation, 792.62 ft). Extremes for period of record: Maximum contents, 55,470 acre-ft April 25, 1970 (elevation, 804.09 ft); minimum, 12,200 acre-ft Oct. 17, 1968 (elevation, 786.53 ft).
- Reservoir is formed by earthfill dam with concrete morning-glory spillway and emergency spillway cut in natural rock; storage began Dec. 30, 1967. Usable capacity, 41,950 acre-ft between elevations 772.5 ft (invert of lowest outlet) and 800.0 ft (crest of morning-glory spillway). Dead storage below elevation 772.5 ft, 1,250 acre-ft. Additional flood-retention capacity, 28,600 acre-ft between elevations 800.0 ft and 808.0 ft (crest of emergency spillway). Figures given herein represent usable contents. There are no gates on spillways and all regulation is done by conduits through dam. Reservoir is used for recreation, flood control, and future municipal supply. Capacity curve furnished by State Department of Natural Resources.

Reservoirs in Muskingum River basin--Continued

03143000 WILLS CREEK RESERVOIR.--Lat 40°09'25", long 81°31'00", in SE 1/4 sec. 23, T.4N., R.6W., Coshocton County, in gate house of dam on Wills Creek, 1.3 miles south of village of Wills Creek. Drainage area, 842 sq mi. Period of record, April 1938 to current year. Month-and contents prior to September 1939 published in WSP 1305. Water-stage recorder. Datum of gage is 733.0 ft above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Extremes for current year: Maximum contents, 40,890 acre-ft Feb. 28 (elevation, 737.89 ft); minimum, 3,750 acre-ft several days in Aug. (elevation, 741.20 ft). Extremes for period of record: Maximum contents, 169,700 acre-ft Mar. 15, 1964 (elevation, 776.73 ft); minimum, 300 acre-ft Oct. 22, 1939 (elevation, 734.10 ft).

Reservoir is formed by earthfill dam completed Oct. 13, 1937. Usable capacity, 194,400 acre-ft between elevations 733.0 ft (lowest outlet) and 779.0 ft (crest of spillway), of which 4,420 acre-ft is in conservation pool. Dead storage below elevation 733.0 ft, 1,580 acre-ft. Figures given herein represent usable contents. Reservoir is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

03147300 DILLON RESERVOIR.--Lat 39°59'32", long 82°04'57", in T.1N., R.6W., Muskingum County, in outlet works control tower at dam on Licking River, 2 miles northwest of Dillon Falls, and 5.6 miles upstream from mouth. Drainage area 742 sq mi. Period of record, January 1961 to current year. Water-stage recorder. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 41,630 acre-ft Feb. 24 (elevation 748.16 ft); minimum, 3,890 acre-ft Mar. 19 (elevation 724.63 ft). Extremes for period of record: Maximum contents, 142,600 acre-ft Mar. 13, 1964 (elevation, 772.88 ft); minimum observed, 206 acre-ft Mar. 31, 1961 (elevation, 710.94 ft).

Reservoir formed by earth dam with concrete spillway; closure of dam made July 29, 1959; storage to maintain conservation pool began Dec. 17, 1960. Usable capacity 274,000 acre-ft between elevations 704.0 ft (lowest outlet) and 790.0 ft (crest of spillway) of which 13,170 acre-ft is in conservation pool. Dead storage below elevation 704.0 ft, 30 acre-ft. Figures given herein represent usable contents. Reservoir is used primarily for flood control. There are no gates on spillway and all regulation is done by gates in conduits through abutment of dam. Gage-height chart and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
03119500 Bolivar Reservoir						
Sept. 30.....	897.70	162	-	962.74	18,910	-
Oct. 31.....	901.51	675	+513	963.23	19,400	+490
Nov. 30.....	903.34	1,070	+395	959.52	13,890	-7,510
Dec. 31.....	898.79	269	-801	957.19	13,830	-2,060
CAL YR 1970.....	-	-	+44	-	-	+1,540
Jan. 31.....	898.00	186	-83	957.16	13,810	-20
Feb. 28.....	936.74	41,910	+41,724	963.36	19,530	+5,720
Mar. 31.....	900.50	499	-41,411	962.08	18,250	-1,280
Apr. 30.....	897.80	170	-329	962.72	18,890	+640
May 31.....	897.50	146	-24	962.64	18,810	-80
June 30.....	897.25	125	-21	962.54	18,710	-100
July 31.....	897.00	105	-20	962.61	18,780	+70
Aug. 31.....	897.22	123	+18	962.40	18,370	-210
Sept. 30.....	896.90	99	-24	962.45	18,620	+50
WTR YR 1971.....	-	-	-63	-	-	-290

03121000 Atwood Reservoir						
Sept. 30.....	928.00	23,590	-	865.63	3.2	-
Oct. 31.....	928.24	23,980	+390	869.82	169	+165.8
Nov. 30.....	928.13	23,800	-180	872.64	609	+440
Dec. 31.....	922.46	19,940	-7,860	868.00	63	-544
CAL YR 1970.....	-	-	-160	-	-	+56
Jan. 31.....	922.51	16,000	+60	866.84	23	-42
Feb. 28.....	928.45	24,310	+8,310	884.44	12,520	+12,497
Mar. 31.....	928.08	23,720	-590	867.65	52	-12,468
Apr. 30.....	927.77	23,250	-470	865.50	2.5	-49.5
May 31.....	927.79	23,280	+30	865.51	2.6	+0.1
June 30.....	927.62	23,020	-260	865.57	2.8	+0.2
July 31.....	927.70	23,140	+120	865.32	1.6	-1.2
Aug. 31.....	927.36	22,630	-510	864.85	0	-1.6
Sept. 30.....	927.53	22,890	+260	864.91	0	0
WTR YR 1971.....	-	-	-700	-	-	-3.2

MUSKINGUM RIVER BASIN

Reservoirs in Muskingum River basin—Continued

MONTHLY ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
	03123500 Beach City Reservoir			03125500 Piedmont Reservoir		
Sept. 30.....	948.54	1,950	-	912.46	32,300	-
Oct. 31.....	949.18	2,260	+310	913.03	33,570	+1,270
Nov. 30.....	949.98	2,690	+430	911.37	29,890	-3,680
Dec. 31.....	949.13	2,230	-460	909.15	25,330	-4,560
CAL YR 1970.....	-	-	+30	-	-	-60
Jan. 31.....	948.54	1,950	-280	909.23	25,490	+160
Feb. 28.....	954.59	6,350	+4,400	911.80	30,840	+5,350
Mar. 31.....	949.27	2,310	-4,040	911.88	31,020	+180
Apr. 30.....	948.66	2,000	-310	912.66	32,750	+1,730
May 31.....	948.64	1,990	-10	912.92	33,330	+580
June 30.....	948.52	1,940	-50	912.65	32,730	-600
July 31.....	948.38	1,870	-70	912.60	32,610	-120
Aug. 31.....	948.40	1,880	+10	912.52	32,440	-170
Sept. 30.....	948.38	1,870	-10	912.79	33,040	+600
WTR YR 1971.....	-	-	-80	-	-	+740

	03126500 Glendening Reservoir			03128000 Tappan Reservoir		
Sept. 30.....	897.52	25,660	-	899.01	34,380	-
Oct. 31.....	897.77	26,080	+420	899.49	35,530	+1,150
Nov. 30.....	895.54	22,340	-3,740	898.85	29,540	-5,990
Dec. 31.....	892.88	18,300	-4,040	894.91	25,470	-4,070
CAL YR 1970.....	-	-	-720	-	-	-80
Jan. 31.....	892.83	18,240	-60	894.80	25,250	-220
Feb. 28.....	897.60	25,790	+7,550	898.75	33,780	+8,530
Mar. 31.....	895.85	22,830	-2,960	898.23	32,580	-1,200
Apr. 30.....	896.70	24,260	+1,430	898.51	33,230	+650
May 31.....	897.79	26,120	+1,860	899.27	35,000	+1,770
June 30.....	897.68	25,930	-190	899.07	34,520	-480
July 31.....	897.67	25,910	-20	898.90	34,120	-400
Aug. 31.....	897.53	25,670	-240	898.74	33,760	-360
Sept. 30.....	897.67	25,910	+240	898.88	34,080	+320
WTR YR 1971.....	-	-	+250	-	-	-300

	03129500 Charles Mill Reservoir			03133000 Pleasant Hill Reservoir		
Sept. 30.....	997.67	8,030	-	1,019.39	13,010	-
Oct. 31.....	997.06	7,170	-860	1,017.08	11,150	-1,860
Nov. 30.....	997.52	7,820	+650	1,013.39	8,610	-2,540
Dec. 31.....	996.81	6,840	-980	1,012.47	8,020	-590
CAL YR 1970.....	-	-	+2,660	-	-	-50
Jan. 31.....	993.24	2,800	-4,040	1,012.54	8,060	+40
Feb. 28.....	1,002.43	16,240	+13,440	1,019.77	13,320	+5,260
Mar. 31.....	996.89	6,950	-9,290	1,019.19	12,840	-480
Apr. 30.....	997.07	7,190	+240	1,019.60	13,180	+340
May 31.....	997.48	7,760	+570	1,019.76	13,320	+140
June 30.....	996.87	6,920	-840	1,019.50	13,100	-220
July 31.....	997.02	7,120	+200	1,019.42	13,030	-70
Aug. 31.....	996.78	6,800	-320	1,019.36	12,980	-50
Sept. 30.....	996.85	6,890	+90	1,018.84	12,560	-420
WTR YR 1971.....	-	-	-1,140	-	-	-450

MUSKINGUM RIVER BASIN

83

Reservoirs in Muskingum River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
<u>03134500 Mohicanville Reservoir</u>						
Sept. 30.....	933.41	42	-	802.47	161	-
Oct. 31.....	933.62	50	+8	802.21	143	-18
Nov. 30.....	939.04	475	+425	806.17	499	+356
Dec. 31.....	934.00	65	-410	803.77	260	-239
CAL YR 1970.....	-	-	+3	-	-	+56
Jan. 31.....	933.37	40	-25	802.09	190	-70
Feb. 28.....	946.00	7,780	+7,740	837.76	29,620	+29,430
Mar. 31.....	934.29	81	-7,699	808.64	831	-28,789
Apr. 30.....	933.60	53	-28	804.16	294	-537
May 31.....	933.67	52	-1	809.76	1,010	+716
June 30.....	933.23	35	-17	801.58	105	-905
July 31.....	933.24	35	0	801.72	113	+8
Aug. 31.....	933.08	29	-6	800.85	66	-47
Sept. 30.....	933.50	46	+17	801.86	121	+55
WTR YR 1971.....	-	-	+6	-	-	-40

<u>03141000 Senecaville Reservoir</u>						
Sept. 30.....	832.12	41,010	-	800.07	42,170	-
Oct. 31.....	833.00	44,170	+3,160	800.44	43,310	+1,140
Nov. 30.....	829.34	31,860	-12,310	796.59	32,420	-10,890
Dec. 31.....	828.40	29,070	-2,790	797.34	34,370	+1,950
CAL YR 1970.....	-	-	+40	-	-	+14,400
Jan. 31.....	828.13	28,290	-780	793.66	25,500	-8,870
Feb. 28.....	832.28	41,590	+13,300	799.15	39,400	+11,900
Mar. 31.....	831.51	39,920	-2,670	-	38,500	-2,900
Apr. 30.....	832.14	41,080	+2,160	795.00	28,550	-7,950
May 31.....	832.25	41,480	+400	801.08	45,310	+16,760
June 30.....	832.05	40,760	-720	800.34	43,000	-2,310
July 31.....	831.78	39,830	-930	800.13	42,350	-650
Aug. 31.....	831.58	39,150	-680	800.03	42,040	-310
Sept. 30.....	832.07	40,830	+1,680	800.25	42,720	+680
WTR YR 1971.....	-	-	-180	-	-	+550

<u>03143000 Wills Creek Reservoir</u>						
Sept. 30.....	741.70	4,170	-	737.07	17,570	-
Oct. 31.....	742.11	4,530	+360	737.16	17,720	+150
Nov. 30.....	744.07	6,650	+2,120	734.67	14,040	-3,680
Dec. 31.....	744.20	6,830	+180	733.98	13,090	-950
CAL YR 1970.....	-	-	+2,200	-	-	-350
Jan. 31.....	742.80	5,200	-1,630	734.07	13,220	+130
Feb. 28.....	757.53	39,490	+34,290	744.51	31,980	+18,760
Mar. 31.....	743.38	5,840	-33,650	725.00	4,120	-27,860
Apr. 30.....	741.85	4,290	-1,550	734.61	13,960	+9,840
May 31.....	742.57	4,980	+690	737.05	17,540	+3,580
June 30.....	741.79	4,240	-740	737.05	17,540	0
July 31.....	741.52	4,020	-220	737.00	17,460	-80
Aug. 31.....	741.41	3,920	-100	737.05	17,540	+80
Sept. 30.....	741.48	3,980	+60	737.07	17,570	+30
WTR YR 1971.....	-	-	-190	-	-	0

a Interpolated

HOCKING RIVER BASIN

03156000 Hunters Run at Lancaster, Ohio

LOCATION.--Lat 39°41'57", long 82°37'18", in NE 1/4 sec. 11, T.14N., R.19W., Fairfield County, on right bank at downstream side of bridge on U.S. Highway 22, 1 mile southwest of Lancaster, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--10.0 sq mi.

PERIOD OF RECORD.--January 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 823.6 ft above mean sea level.

AVERAGE DISCHARGE.--15 year, 9.41 cfs (12.78 inches per year).

EXTREMES.--Current year: Maximum discharge, 846 cfs Feb. 22 (gage height, 5.84 ft); minimum daily 0.82 cfs Sept. 29, 30.
Period of record: Maximum discharge, 1,820 cfs May 27, 1968 (gage height 8.00 ft), from rating curve extended above 600 cfs on basis of slope-area measurement at gage height 7.09 ft; minimum, 0.28 cfs Aug. 3, 4, 1969.
Flood of July 21 or 22, 1948 reached a stage of 15.4 ft (discharge, 11,200 cfs, on basis of contracted-opening measurement of peak flow at Pennsylvania Railroad bridge, 0.8 mile upstream).

REMARKS.--Records fair. Flood flow affected by temporary retention in four retarding basins upstream from station (combined capacity, 2,620 acre-ft). Controlled drainage area is 8.49 sq mi. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	7.6	6.0	7.2	3.3	15	7.6	3.9	3.1	3.6	1.9	1.3
2	2.7	28	5.3	6.8	3.0	14	8.8	4.3	3.0	2.9	1.9	1.1
3	2.4	23	6.7	6.6	2.8	14	7.0	4.7	2.9	2.9	2.2	1.5
4	2.0	11	8.8	63	4.0	13	7.0	3.9	2.8	2.9	3.2	1.6
5	1.9	7.6	6.1	33	100	12	6.5	4.3	2.7	2.7	2.2	1.2
6	1.9	5.5	5.2	17	35	49	6.5	9.4	2.7	2.4	2.0	1.1
7	1.9	4.7	4.8	13	23	80	6.5	10	2.8	2.4	2.0	1.9
8	1.9	3.9	4.5	11	16	24	6.5	27	2.7	2.4	1.9	1.5
9	1.9	3.9	4.3	9.6	12	18	6.5	11	2.6	2.4	1.9	1.2
10	2.7	3.9	4.2	8.6	11	19	6.5	7.0	2.5	2.9	3.2	1.0
11	9.4	3.6	5.2	8.0	10	21	6.0	6.5	2.4	4.3	3.6	1.1
12	5.1	3.9	51	7.4	10	41	6.0	6.5	2.3	3.2	2.7	1.3
13	7.6	3.6	27	8.6	38	31	6.0	6.5	3.4	2.7	2.4	1.2
14	8.2	7.6	18	38	18	20	6.5	5.5	3.1	2.4	2.2	1.5
15	8.2	29	14	17	13	21	6.0	5.1	2.8	2.2	2.0	1.3
16	5.1	13	19	12	10	16	6.0	5.1	2.5	2.4	1.9	1.2
17	4.3	9.4	21	10	54	14	6.0	5.1	2.3	2.2	1.6	1.3
18	3.6	7.8	16	8.4	48	12	5.5	4.7	2.3	2.0	1.5	1.2
19	3.2	6.8	14	7.4	44	13	5.1	4.7	2.2	2.2	1.1	1.1
20	3.6	16	11	6.6	42	12	5.1	4.7	2.1	2.0	1.3	1.1
21	3.9	13	12	5.8	36	12	5.1	4.3	4.2	1.9	1.3	1.1
22	3.2	10	75	5.4	180	12	4.7	4.3	2.9	1.9	1.7	.96
23	2.9	7.7	53	5.0	80	11	4.7	4.3	2.3	1.7	1.5	.96
24	3.6	6.0	32	4.7	40	11	4.7	4.3	2.2	2.9	1.1	.96
25	4.3	5.4	20	4.4	30	10	4.3	7.0	4.3	2.9	1.9	.89
26	4.3	5.6	15	4.1	25	9.4	4.3	4.3	32	2.7	9.4	1.2
27	5.1	6.6	13	3.9	22	8.8	4.3	3.9	8.2	2.0	2.7	1.0
28	6.0	6.2	11	3.7	19	8.8	5.5	3.5	4.7	1.9	1.9	.89
29	10	6.7	9.4	3.5	-----	8.2	3.9	3.4	4.3	1.9	1.6	.82
30	14	6.6	8.4	4.2	-----	7.6	3.9	3.3	3.6	1.9	1.5	.82
31	9.4	-----	7.8	3.6	-----	7.0	-----	3.2	-----	2.0	1.3	-----
TOTAL	148.3	273.6	508.7	339.5	929.1	564.8	173.0	185.7	121.9	76.8	68.6	35.30
MEAN	4.78	9.12	16.4	11.0	33.2	18.2	5.77	5.99	4.06	2.48	2.21	1.18
MAX	14	29	75	63	180	80	8.8	27	32	4.3	9.4	1.9
MIN	1.9	3.6	4.2	3.5	2.8	7.0	3.9	3.2	2.1	1.7	1.1	.82
CFSM	.43	.91	1.64	1.10	3.32	1.82	.58	.60	.41	.25	.22	.12
IN.	.55	1.02	1.89	1.26	3.46	2.10	.64	.69	.45	.29	.26	.13

CAL YR 1970 TOTAL 5,499.30 MEAN 15.1 MAX 451 MIN 1.5 CFSM 1.51 IN 20.46
WTR YR 1971 TOTAL 3,425.30 MEAN 9.38 MAX 180 MIN .82 CFSM .94 IN 12.74

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	Unknown	5.84	646	3-6	2230	3.95	280

HOCKING RIVER BASIN

85

03156400 Hocking River at Lancaster, Ohio

LOCATION.—lat 39°42'24", long 82°36'03", in NE 1/4 sec. 12, T.14N., R.19W., Fairfield County, on right bank 25 ft upstream from Columbus Street Bridge in Lancaster, and 0.5 mile downstream from Hunters Run.

DRAINAGE AREA.—48.2 sq mi.

PERIOD OF RECORD.—June 1956 to current year.

GAGE.—Water-stage recorder. Datum of gage is 797.9 ft above mean sea level.

AVERAGE DISCHARGE.—15 years, 39.5 cfs.

EXTREMES.—Current year: Maximum discharge, 1,350 cfs Feb. 22 (gage height, 10.70 ft); minimum daily, 6.4 cfs Sept. 23.

Period of record: Maximum discharge, 3,520 cfs May 27, 1968 (gage height 15.75 ft); minimum, 0.80 cfs Sept. 17, 1964; minimum gage height, 1.63 ft Jan. 4, 5, 1959.

REMARKS.—Records fair prior to July 1, poor thereafter. Some diurnal fluctuation caused by industrial plants upstream from station. Water supply for city of Lancaster is pumped from wells adjacent to the Hocking River 1.1 miles upstream from station. The pumpage averaged 7.4 cfs in 1971 and is returned as sewage 0.8 mile downstream from the station. Flood flow affected by temporary retention in eight retarding basins (combined capacity, 8,710 acre-ft) upstream from station. Controlled drainage area is 24.4 sq mi (data furnished by U.S. Department of Agriculture Soil Conservation Service). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	18	27	29	15	61	35	17	16	17	8.2	8.4
2	26	86	24	28	14	54	39	20	15	15	7.8	8.6
3	22	112	28	27	15	51	34	21	15	13	15	9.4
4	18	69	35	197	180	48	31	17	15	11	19	10
5	17	50	29	133	407	47	30	18	16	10	13	8.5
6	15	39	25	70	121	162	30	56	13	9.6	11	9.0
7	14	33	22	47	63	352	29	65	14	9.8	9.2	9.6
8	14	28	21	40	41	134	28	167	13	10	7.8	8.8
9	13	26	21	38	39	81	29	78	12	11	9.4	8.0
10	17	24	19	35	36	80	26	49	12	14	18	7.8
11	43	22	26	33	35	96	25	38	12	24	12	7.4
12	31	22	162	32	85	164	25	38	12	16	9.6	8.2
13	45	21	114	37	150	163	26	33	18	13	8.0	9.2
14	45	40	71	84	71	107	26	27	14	11	7.8	8.8
15	54	131	50	62	48	119	24	23	14	11	7.6	8.0
16	36	71	61	46	39	102	24	25	11	13	7.6	8.6
17	27	56	78	40	202	75	24	27	11	12	7.4	8.2
18	22	47	59	32	196	64	24	21	11	12	7.4	7.8
19	19	41	49	28	152	68	22	20	9.6	13	7.4	7.2
20	19	62	40	26	153	64	22	21	9.2	12	8.6	7.0
21	19	46	42	24	101	55	23	20	23	11	7.4	6.8
22	18	40	207	23	606	54	22	19	14	9.6	8.4	6.6
23	16	34	157	22	278	53	22	19	10	8.2	7.6	6.4
24	15	27	105	21	136	48	21	19	10	26	7.0	7.0
25	14	24	69	19	96	46	20	42	35	19	10	10
26	14	24	53	17	91	44	19	23	136	12	42	9.0
27	13	25	42	16	103	42	21	19	44	10	15	8.2
28	13	24	38	15	74	41	25	18	26	8.2	11	7.8
29	18	26	34	15	-----	39	19	17	16	8.4	9.0	7.4
30	27	31	32	21	-----	36	18	17	14	8.8	8.0	7.0
31	22	-----	30	18	-----	34	-----	16	-----	8.8	8.2	-----
TOTAL	718	1,299	1,770	1,275	3,547	2,584	763	1,010	590.8	387.4	335.4	244.8
MEAN	23.2	43.3	57.1	41.1	127	83.4	25.4	32.6	19.7	12.5	10.8	8.16
MAX	54	131	207	197	606	352	39	167	136	26	42	10
MIN	13	18	19	15	14	34	18	16	9.2	8.2	7.0	6.4

CAL YR 1970 TOTAL 18,956.5 MEAN 51.9 MAX 1,150 MIN 9.0
WTR YR 1971 TOTAL 14,524.4 MEAN 39.8 MAX 606 MIN 6.4

PEAK DISCHARGE (BASE, 700 CFS).—Feb. 22 (0845) 1,350 cfs (10.70 ft).

HOCKING RIVER BASIN

03157000 Clear Creek near Rockbridge, Ohio

LOCATION.—Lat 39°35'18", long 82°34'43", in NE 1/4 sec. 20, T.13N., R.18W., Hocking County, on left bank at upstream side of county road bridge, 400 ft downstream from unnamed right bank tributary, 2 miles upstream from mouth, and 3 miles west of Rockbridge.

DRAINAGE AREA.—89.0 sq mi.

PERIOD OF RECORD.—October 1939 to current year.

GAGE.—Water-stage recorder. Datum of gage is 760.13 ft above mean sea level, adjustment of 1912. Prior to May 2, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.—32 years, 83.9 cfs (12.80 inches per year).

EXTREMES.—Current year: Maximum discharge, 2,630 cfs Feb. 22 (gage height, 9.83 ft); minimum, 4.9 cfs Jan. 27 (result of freezeup); minimum daily 14 cfs Aug. 24.

Period of record: Maximum discharge, 16,000 cfs July 22, 1948 (gage height, 17.68 ft, from high-water mark in well), from rating curve extended above 4,300 cfs on basis of slope-area measurement of peak flow; minimum, 3.0 cfs Dec. 29, 1947, result of freezeup.

REMARKS.—Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 1305: 1940(M), 1943(M), 1945(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	34	51	64	38	128	60	34	34	41	19	16
2	28	113	48	60	36	113	67	37	33	35	18	16
3	25	203	45	58	34	105	59	50	32	29	21	17
4	23	100	54	361	381	96	55	38	30	27	31	18
5	21	77	49	256	743	91	52	37	29	26	26	17
6	21	63	44	110	185	213	52	132	28	25	20	16
7	20	55	41	80	117	695	51	144	28	24	18	24
8	20	48	40	64	91	245	50	448	28	22	17	18
9	20	44	40	58	93	154	48	181	25	47	17	16
10	21	42	39	54	105	157	46	123	25	70	29	15
11	39	39	42	52	82	215	44	97	24	45	28	16
12	36	38	414	50	130	323	45	91	24	38	19	18
13	46	37	223	50	318	320	45	89	91	29	17	17
14	53	41	143	197	150	207	46	76	157	26	17	20
15	77	188	109	120	100	263	42	66	97	24	16	17
16	53	100	123	84	80	203	42	63	52	28	16	18
17	41	75	165	70	322	150	42	67	39	24	15	19
18	37	65	123	60	359	128	42	57	33	22	15	17
19	33	58	105	52	315	135	39	53	30	25	15	17
20	33	88	87	50	340	127	40	50	28	22	15	17
21	34	98	87	48	216	105	39	46	41	21	16	16
22	33	77	511	46	1,450	99	41	44	46	19	17	16
23	30	64	476	44	671	94	38	42	29	19	16	16
24	29	48	302	43	335	85	38	42	26	25	14	15
25	28	45	167	41	239	80	35	71	27	30	17	15
26	28	45	125	39	215	78	35	51	330	30	51	24
27	26	50	106	30	225	73	34	44	90	24	24	20
28	25	48	88	34	154	72	42	42	56	20	19	17
29	28	46	79	40	-----	69	36	41	58	22	17	16
30	40	58	71	44	-----	63	35	38	41	21	16	16
31	39	-----	69	40	-----	60	-----	36	-----	21	16	-----
TOTAL	1,018	2,087	4,066	2,399	7,524	4,946	1,340	2,430	1,611	881	612	520
MEAN	32.8	69.6	131	77.4	269	160	44.7	78.4	53.7	28.4	19.7	17.3
MAX	77	203	511	361	1,450	695	67	448	330	70	51	24
MIN	20	34	39	30	34	60	34	34	24	19	14	15
CFSM	.37	.78	1.47	.87	3.02	1.80	.50	.88	.60	.32	.22	.19
IN.	.43	.87	1.70	1.00	3.14	2.07	.56	1.02	.67	.37	.26	.22

CAL YR 1970 TOTAL 36,109 MEAN 98.9 MAX 2,270 MIN 14 CFSM 1.11 IN 15.09
WTR YR 1971 TOTAL 29,434 MEAN 80.6 MAX 1,450 MIN 14 CFSM .91 IN 12.30

PEAK DISCHARGE (BASE, 1,900 CFS).—Feb. 22 (1145) 2,630 cfs (9.83 ft).

HOCKING RIVER BASIN

87

03157500 Hocking River at Enterprise, Ohio

LOCATION.—Lat 39°33'54", long 82°28'29", in NW 1/4 sec. 5, T.14N., R.17W., Hocking County, on right bank at upstream side of abandoned bridge at Enterprise, 4 miles downstream from Buck Run, and 4.3 miles upstream from Scott Creek.

DRAINAGE AREA.—459 sq mi.

PERIOD OF RECORD.—October 1930 to current year. Prior to May 1931 monthly discharge only, published in WSP 1305.

GAGE.—Water-stage recorder. Datum of gage is 723.58 ft above mean sea level. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.—41 years, 434 cfs (12.84 inches per year).

EXTREMES.—Current year: Maximum discharge, 6,910 cfs Feb. 22 (gage height, 12.51 ft); minimum, 50 cfs Aug. 19, 20, Sept. 24, 25. Period of record: Maximum discharge, 26,000 cfs Mar. 10, 1964 (gage height, 21.31 ft), from rating curve extended above 17,000 cfs on basis of contracted-opening and slope-area measurement of peak flow; minimum, 12 cfs Aug. 19, 1932.

Flood of March 1907, reached a stage of 22.0 ft, from floodmark (discharge, 36,000 cfs), from reports of Corps of Engineers.

REMARKS.—Records good. Flood flow affected by temporary retention in eight retarding basins (combined capacity, 8,710 acre-ft) constructed between 1955 and 1961 upstream from Lancaster (see Station No. 03156400). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 873: 1938. WSP 1907: Drainage area. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	203	253	339	230	728	332	149	137	154	67	58
2	134	292	225	315	220	668	360	154	133	137	62	55
3	123	1,010	213	301	200	596	343	197	129	112	65	64
4	112	563	243	1,240	360	532	301	184	122	100	104	68
5	105	381	277	1,800	2,560	521	281	163	118	91	102	58
6	99	298	235	1,010	1,780	708	271	656	122	88	84	54
7	96	255	208	600	1,080	2,790	268	912	135	84	70	70
8	96	225	195	498	604	2,090	258	2,160	151	79	62	64
9	96	205	193	456	464	1,070	243	1,550	114	81	58	59
10	105	190	188	396	660	900	234	780	102	156	65	55
11	151	181	188	360	580	996	219	556	97	126	133	52
12	190	175	1,120	339	510	1,290	214	502	93	133	95	55
13	203	170	1,330	325	1,290	1,720	214	521	106	106	71	54
14	215	179	762	712	852	1,220	222	456	564	88	62	73
15	298	706	546	804	616	1,200	208	371	265	79	58	73
16	258	570	507	525	472	1,270	200	332	163	91	54	67
17	186	381	782	468	808	896	197	360	129	82	54	70
18	158	313	658	382	1,820	744	197	315	112	74	52	68
19	145	277	528	353	1,770	720	186	265	102	76	51	62
20	141	307	441	310	1,820	704	181	237	95	76	51	59
21	149	395	399	290	1,440	624	176	214	106	71	67	58
22	153	310	1,480	280	4,540	588	178	194	131	67	62	55
23	151	265	2,020	270	6,020	560	176	181	95	64	59	54
24	139	210	1,780	260	4,020	517	168	173	84	73	52	52
25	132	180	1,060	250	1,600	483	161	284	81	110	54	52
26	126	200	736	210	1,140	464	151	281	1,100	110	350	82
27	124	205	604	180	1,130	437	149	197	468	84	225	70
28	121	208	498	210	900	419	178	176	234	71	108	71
29	128	203	437	230	-----	404	176	166	255	71	79	62
30	172	245	389	240	-----	371	156	158	194	70	67	56
31	235	-----	364	240	-----	343	-----	151	-----	73	62	-----
TOTAL	4,690	9,302	18,859	14,193	39,486	26,573	6,598	12,995	5,737	2,885	2,605	1,850
MEAN	151	310	608	458	1,410	857	220	419	191	93.1	84.0	61.7
MAX	298	1,010	2,020	1,800	6,020	2,790	360	2,160	1,100	156	350	82
MIN	96	170	188	180	200	343	149	149	81	64	51	52
CFSM	.33	.68	1.32	1.00	3.07	1.87	.48	.91	.42	.20	.18	.13
IN.	.38	.75	1.53	1.15	3.20	2.15	.53	1.05	.46	.23	.21	.15

CAL YR 1970 TOTAL 178,239 MEAN 488 MAX 7,700 MIN 75 CFSM 1.06 IN 14.45
WTR YR 1971 TOTAL 145,773 MEAN 399 MAX 6,020 MIN 51 CFSM .87 IN 11.81

PEAK DISCHARGE (BASE, 3,500 CFS).—Feb. 22 (1930) 6,910 cfs (12.51 ft).

HOCKING RIVER BASIN

03158500 Burr Oak Reservoir at Burr Oak, Ohio

LOCATION.--Lat 39°32'30", long 82°03'27", near center of sec. 6, T.11N., R.14W., Athens County, in control house at Tom Jenkins Dam on East Branch Sunday Creek, 0.2 mile upstream from mouth, 0.4 mile southeast of Burr Oak, and 3 miles northeast of Glouster.

DRAINAGE AREA.--33.1 sq mi.

PERIOD OF RECORD.--February 1952 to current year. Published as Tom Jenkins Reservoir at Burr Oak October 1952 to September 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 10,520 acre-ft May 9 (elevation, 722.87 ft); minimum, 5,670 acre-ft Dec. 11 (elevation, 714.85 ft).

Period of record: Maximum contents, 17,820 acre-ft May 31, 1960 (elevation, 731.53 ft); minimum, 3,450 acre-ft Nov. 20, 1953 (elevation, 709.89 ft).

REMARKS.--Reservoir is formed by earth dam with emergency spillway; storage began Feb. 2, 1952. Capacity at spillway level (elevation, 740 ft), 26,900 acre-ft, of which 9,300 acre-ft is in conservation pool. Dead storage, 35 acre-ft. Figures given herein represent total contents. Reservoir is used for flood control, although conservation pool is operated for increased low flow for water supply and for recreation and conservation of fish and wildlife. Outflow is controlled by operation of gates in conduit through dam.

COOPERATION.--Water-stage recorder graph and capacity table furnished by Corps of Engineers.

MONTHEND GAGE HEIGHT AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	721.05	9,260	-
Oct. 31.....	717.56	7,110	-2,150
Nov. 30.....	715.01	5,750	-1,360
Dec. 31.....	714.96	5,730	-20
CAL YR 1970.....	-	-	-3,920
Jan. 31.....	715.00	5,740	+10
Feb. 28.....	721.06	9,270	+3,530
Mar. 31.....	721.07	9,270	0
Apr. 30.....	721.58	9,620	+350
May 31.....	721.16	9,330	-290
June 30.....	721.22	9,370	+40
July 31.....	721.17	9,340	-30
Aug. 31.....	721.12	9,310	-30
Sept. 30.....	721.06	9,270	-40
WTR YR 1971.....	-	-	+10

HOCKING RIVER BASIN

89

03159000 Sunday Creek at Gloucester, Ohio

LOCATION.—Lat 39°30'03", long 82°05'07", Athens County, on left bank 150 ft downstream from West Branch Sunday Creek and 200 ft upstream from bridge on State Highway 78 at Gloucester.

DRAINAGE AREA.—104 sq mi.

PERIOD OF RECORD.—October 1951 to current year.

GAGE.—Water-stage recorder. Datum of gage is 665.18 ft above mean sea level. Prior to Dec. 4, 1951, nonrecording gage at site 300 ft downstream at same datum.

AVERAGE DISCHARGE.—20 years, 102 cfs.

EXTREMES.—Current year: Maximum discharge, 2,460 cfs Feb. 22 (gage height, 15.15 ft); minimum, 2.1 cfs Sept. 30.
Period of record: Maximum discharge, 7,020 cfs Mar. 5, 1963 (gage height, 17.81 ft), from rating curve extended above 3,600 cfs on basis of velocity-area study and flow over road estimate of peak discharge; minimum, 0.4 cfs Oct. 26, 27, 1953.
Flood of March 1907 reached a stage of 22.0 ft, from information by Corps of Engineers.

REMARKS.—Records good. Flow partially regulated by Burr Oak Reservoir 5.2 miles upstream (see sta. 03158500). Most of small diversion (average 0.48 cfs) below Burr Oak Reservoir returned to stream above station. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	67	51	65	27	163	57	27	24	13	5.3	3.8
2	165	61	78	59	26	134	62	29	25	12	4.6	4.2
3	165	238	53	56	25	128	56	67	21	10	6.4	4.6
4	165	102	53	448	40	122	52	104	19	9.6	29	3.1
5	166	63	47	516	609	118	49	103	27	9.2	15	3.1
6	162	48	44	271	581	150	45	276	56	9.2	8.7	3.1
7	159	39	41	124	202	382	44	338	27	9.6	6.4	3.1
8	168	33	39	98	160	314	41	1,060	20	8.2	6.0	3.8
9	174	28	44	77	130	222	40	430	18	7.8	5.7	4.2
10	176	26	41	73	110	185	38	419	16	7.3	5.3	3.8
11	109	25	39	68	92	232	36	364	16	11	4.9	3.4
12	22	24	320	69	110	351	36	221	16	9.6	6.0	4.2
13	18	28	448	70	365	392	35	289	23	8.2	4.9	9.2
14	19	30	275	312	329	293	35	231	41	7.3	4.2	10
15	33	249	113	340	219	330	33	190	20	6.9	4.2	6.4
16	26	127	123	215	145	345	32	171	17	7.3	4.2	7.3
17	19	75	236	140	154	232	32	160	15	6.9	3.4	8.2
18	18	58	203	80	246	167	33	122	15	6.9	3.8	11
19	17	45	145	72	364	164	29	89	14	7.3	4.2	6.9
20	15	49	94	66	408	162	30	54	13	6.9	4.2	4.2
21	23	69	100	64	247	151	32	47	13	5.7	4.9	3.4
22	36	55	738	62	1,090	165	34	41	14	5.7	4.2	3.1
23	28	128	929	60	1,280	152	34	38	13	6.0	4.2	3.1
24	23	318	611	58	357	141	32	35	11	30	3.8	3.1
25	21	308	382	54	414	132	31	49	10	18	4.2	3.8
26	18	310	185	50	387	128	30	43	15	8.7	5.7	4.6
27	16	307	142	44	329	120	30	35	13	6.9	5.7	3.4
28	15	267	107	39	199	117	34	33	11	6.0	4.2	3.4
29	17	111	99	36	-----	94	30	29	13	5.7	4.2	4.6
30	105	71	84	33	-----	66	27	29	12	5.7	3.4	5.7
31	148	-----	71	30	-----	59	-----	28	-----	5.7	3.1	-----
TOTAL	2,332	3,359	5,935	3,749	8,645	5,911	1,129	5,151	568	278.3	184.0	145.8
MEAN	75.2	112	191	121	309	191	37.6	166	18.9	8.98	5.94	4.86
MAX	176	318	929	516	1,280	392	62	1,060	56	30	29	11
MIN	15	24	39	30	25	59	27	27	10	5.7	3.1	3.1
CAL YR 1970	TOTAL 41,913.2	MEAN 115	MAX 1,760	MIN 6.9								
WTR YR 1971	TOTAL 37,387.1	MEAN 102	MAX 1,280	MIN 3.1								

HOCKING RIVER BASIN

03159500 Hocking River at Athens, Ohio

LOCATION.--Lat 39°19'45", long 82°05'17", in T.9N., R.14W., Athens County, on left bank at upstream side of Mill Street Bridge, 0.8 mile east of business section of Athens, and 3.5 miles downstream from Margaret Creek.

DRAINAGE AREA.--943 sq mi.

PERIOD OF RECORD.--May 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.81 ft above mean sea level. Prior to Aug. 17, 1931, nonrecording gage at same site and datum. Since June 19, 1970, water-stage recorder at temporary site 5.3 miles downstream at datum 14.81 ft lower.

AVERAGE DISCHARGE.--56 years, 968 cfs.

EXTREMES.--Current year: Maximum discharge, 14,400 cfs Feb. 23 (gage height, 23.34 ft at temporary site); minimum 68 cfs Aug. 25.
Period of record: Maximum discharge, 32,900 cfs Mar. 11, 1964 (gage height, 24.18 ft); minimum, 9 cfs Oct. 11, 1930.
Flood of March 1907 reached a stage of about 27 ft from floodmarks (discharge, 50,000 cfs, estimated by Corps of Engineers).

REMARKS.--Records good. Some regulation by Burr Oak Reservoir (capacity 26,900 acre-ft) on East Branch Sunday Creek 29 miles upstream upstream beginning 1952 (see Station No. 03158500), by Hocking Lake (capacity 3,060 acre-ft) on Clear Fork 39.4 miles upstream beginning in 1949, and by temporary retention in eight retarding basins (combined capacity, 6,710 acre-ft) constructed between 1955 and 1961 upstream from Lancaster (see Station No. 03156400). Diurnal fluctuation at low flow caused by mill 3.2 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 523: 1918-19(M). WSP 743: 1922(M). WSP 873: 1920, 1922, 1924-28, 1937. WSP 1113: 1932.
WSP 1143: 1933. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	CCT	NCV	EEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	862	502	768	445	1,970	684	318	325	344	121	113
2	192	677	500	708	355	1,420	684	307	318	307	119	103
3	231	1,940	485	661	368	1,420	691	388	305	284	169	93
4	164	2,060	468	1,420	448	1,300	640	510	298	250	583	206
5	119	1,120	488	4,400	2,820	1,180	589	460	300	224	727	137
6	139	818	490	3,400	5,440	1,280	571	792	359	204	364	111
7	169	670	448	1,740	3,680	3,050	556	2,910	359	180	252	98
8	204	574	409	1,640	2,000	4,940	545	5,320	392	174	199	96
9	252	510	395	970	1,240	4,110	522	5,410	305	169	167	107
10	309	478	383	910	994	2,190	498	3,210	272	156	141	105
11	414	443	385	804	940	2,420	478	1,960	236	263	135	84
12	392	421	870	722	1,170	2,690	458	1,540	220	247	176	94
13	335	407	3,230	691	2,510	3,320	448	1,810	229	240	180	125
14	352	409	2,390	1,850	2,550	3,280	445	1,500	448	197	137	131
15	538	866	1,440	2,950	2,090	2,520	440	1,340	702	160	105	123
16	538	1,750	1,050	1,920	1,440	3,340	419	1,070	448	210	117	169
17	465	1,070	1,460	1,320	1,260	2,680	404	1,010	330	206	100	197
18	356	789	1,870	1,050	2,600	1,920	400	962	268	154	87	162
19	298	664	1,400	814	3,840	1,630	395	789	236	149	81	139
20	282	655	1,090	744	3,940	1,620	378	658	213	133	81	131
21	309	800	922	689	3,770	1,450	368	574	197	129	79	113
22	438	764	3,620	620	5,510	1,340	371	520	194	121	84	103
23	390	649	6,000	580	12,200	1,300	363	488	213	113	87	96
24	342	664	4,540	540	11,500	1,210	355	450	180	119	79	93
25	307	680	4,020	520	6,500	1,100	347	450	162	268	79	84
26	289	652	2,450	490	3,420	1,050	328	589	330	263	135	113
27	268	661	1,680	460	3,050	986	319	525	1,320	213	279	145
28	247	649	1,300	433	2,560	918	332	433	628	180	309	141
29	256	580	1,050	468	-----	878	349	392	414	158	194	119
30	724	500	902	470	-----	806	347	371	376	137	149	113
31	1,400	-----	830	472	-----	730	-----	354	-----	127	123	-----
TOTAL	10,618	23,782	47,067	34,825	89,380	60,188	13,723	37,810	10,487	6,079	5,633	3,648
MEAN	352	793	1,518	1,123	3,152	1,942	457	1,220	350	196	182	122
MAX	1,400	2,060	6,000	4,400	12,200	4,840	691	5,410	1,320	344	722	206
MIN	119	407	383	433	368	730	318	307	162	113	79	84
CAL YR 1970	TOTAL 334,695	MEAN 917	MAX 11,400	MIN 108								
WTR YR 1971	TOTAL 343,540	MEAN 941	MAX 12,200	MIN 79								

PEAK DISCHARGE (BASE, 7,500 CFS).--Feb. 23, 1971 (2000) 14,400 cfs (23.34 ft).

SHADE RIVER BASIN

91

03159540 Shade River near Chester, Ohio

LOCATION.--Lat 39°03'49", long 81°52'55", in NE 1/4 sec. 10, T.3N., R.12W., Meigs County, on right bank at downstream side of bridge on Oak Hill Road, 200 ft upstream from Sugar Run, 2.8 miles southeast of Chester, and 8.5 miles northeast of Pomeroy.

DRAINAGE AREA.--156 sq mi, includes that of Sugar Run.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1956, 1962-65. June 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 576.91 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 152 cfs (13.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,920 cfs Feb. 23 (gage height, 17.10 ft); minimum, 4.4 cfs July 25.

Period of record: Maximum discharge, 8,170 cfs May 25, 1968 (gage height 27.38 ft); minimum, 0.30 cfs Sept. 7, 8, 9, 10, 1966 (gage height, 3.35 ft).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	413	121	96	40	221	66	34	26	14	16	7.2
2	29	275	96	90	38	172	82	34	31	12	10	6.5
3	42	1,090	85	86	36	151	90	59	32	13	104	6.8
4	57	374	105	794	282	137	71	67	28	9.3	1,940	34
5	30	217	91	1,210	1,860	134	63	51	25	7.2	1,410	22
6	22	151	77	344	1,170	295	60	145	29	6.4	174	13
7	18	118	65	163	378	1,040	62	386	29	18	86	10
8	15	96	58	140	275	443	58	1,270	29	12	54	8.9
9	13	81	57	129	169	246	53	502	34	6.8	39	8.4
10	12	89	56	117	239	237	50	214	22	11	31	6.8
11	16	96	55	106	187	494	46	134	18	43	26	6.5
12	22	80	428	102	306	349	45	118	16	37	22	5.8
13	20	72	453	108	1,060	246	45	713	16	21	19	31
14	27	74	205	1,000	1,000	196	81	872	57	12	16	83
15	129	544	142	908	350	181	71	291	32	8.0	14	38
16	95	346	137	302	208	225	55	180	27	6.1	18	65
17	51	172	336	207	226	156	50	167	20	27	13	239
18	35	130	246	163	505	129	48	126	14	18	12	72
19	29	111	171	120	440	130	45	95	10	12	11	40
20	26	307	134	110	430	151	41	80	9.8	14	9.8	31
21	47	429	323	100	358	145	40	67	8.0	17	8.9	26
22	145	201	2,200	92	1,380	132	46	55	7.5	9.8	8.9	21
23	102	160	1,950	84	2,600	120	46	48	8.4	6.4	9.3	18
24	68	114	1,100	78	602	105	42	44	7.9	4.7	9.8	16
25	52	87	400	72	326	95	38	50	6.8	4.7	8.9	14
26	43	89	264	66	259	96	35	64	35	6.4	10	266
27	36	90	194	60	548	98	33	42	61	8.8	23	464
28	30	85	147	52	350	90	38	34	33	9.8	20	91
29	71	74	121	46	-----	86	49	32	37	16	13	50
30	1,110	130	121	44	-----	76	38	31	19	16	9.8	38
31	1,520	-----	109	42	-----	69	-----	30	-----	28	8.0	-----
TOTAL	3,950	6,295	10,047	7,031	15,622	6,445	1,587	6,035	728.4	435.4	4,154.4	1,738.9
MEAN	127	210	324	227	558	208	52.9	195	24.3	14.0	134	58.0
MAX	1,520	1,090	2,200	1,210	2,600	1,040	90	1,270	61	43	1,940	464
MIN	12	72	55	42	36	69	33	30	6.8	4.7	8.0	5.8
CFSM	.81	1.35	2.08	1.46	3.58	1.33	.34	1.25	.16	.09	.06	.37
IN.	.94	1.50	2.40	1.68	3.73	1.54	.38	1.44	.17	.10	.99	.41

CAL YR 1970 TOTAL 63,268.8 MEAN 173 MAX 3,270 MIN 2.6 CFSM 1.11 IN 15.09
WTR YR 1971 TOTAL 64,069.1 MEAN 176 MAX 2,600 MIN 4.7 CFSM 1.13 IN 15.28

PEAK DISCHARGE (BASE, 2,400 CFS REVERED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	1230	16.12	2,630	8-4	1930	16.97	2,880
-23	1000	17.10	2,920				

03201600 Sandy Run above Big Four Hollow Creek near Lake Hope, Ohio

LOCATION.—Lat 39°21'45", long 82°16'47" in NW 1/4 SW 1/4 sec. 11, T.11N., R.16W., Vinton County, on right bank 250 ft upstream from Big Four Hollow Creek, 150 ft downstream from Morgan Hollow Creek, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.—0.98 sq mi.

PERIOD OF RECORD.—October 1970 to current year.

GAGE.—Water-stage recorder, with concrete weir, and 6-inch Parshall flume. Altitude of gage is 770.0 ft (from topographic map).

EXTREMES.—Current year: Maximum discharge, about 100 cfs Feb. 22; minimum 0.02 cfs Sept. 24, 25 (gage height 0.05 ft).

Period of record: Maximum discharge about 100 cfs Feb. 22, 1971; minimum 0.02 cfs Sept. 24, 25, 1971 (gage height 0.05 ft).

REMARKS.—Records good except those for periods of no gage-height record, which are fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.50	.34	.46	.70	1.2	.44	.21	.10	.07	.03	.03
2	.10	3.3	.30	.46	.25	1.1	.58	.33	.10	.06	.03	.03
3	.18	2.1	.34	.45	1.2	1.0	.44	.66	.10	.05	.51	.08
4	.14	.72	.54	9.0	3.0	1.0	.38	.50	.09	.05	3.4	.05
5	.10	.56	.40	3.5	13	1.2	.36	.66	.09	.05	.34	.04
6	.09	.44	.32	1.9	4.5	7.4	.39	12	.09	.05	.13	.03
7	.09	.36	.28	1.4	2.0	10	.38	12	.09	.04	.09	.03
8	.09	.30	.30	1.0	1.5	3.7	.34	3.3	.08	.04	.07	.03
9	.08	.30	.30	.85	1.3	2.2	.33	2.3	.07	.04	.06	.03
10	.15	.27	.25	.76	1.0	3.0	.25	1.8	.07	.18	.05	.03
11	.21	.24	.51	.70	.56	5.2	.25	1.4	.06	.24	.17	.04
12	.18	.27	3.6	.66	2.7	4.4	.28	1.7	.08	.07	.07	.04
13	.18	.24	1.3	1.0	7.0	2.8	.33	2.9	.25	.06	.04	.09
14	.33	1.3	.91	8.0	2.2	2.2	.25	2.0	.12	.05	.04	.05
15	.40	3.7	.81	2.4	1.8	2.9	.25	1.5	.08	.05	.04	.04
16	.20	1.1	1.2	1.5	1.4	2.2	.27	1.2	.07	.23	.04	.10
17	.16	.78	2.4	1.3	1.9	1.8	.27	1.0	.06	.06	.04	.05
18	.18	.66	1.6	1.0	2.6	1.3	.22	.76	.05	.07	.04	.04
19	.18	.50	1.2	.80	3.0	1.3	.21	.62	.05	.10	.04	.04
20	.18	1.1	.81	.66	4.0	1.1	.24	.52	.05	.06	.04	.06
21	.18	.76	2.3	.60	2.0	.93	.27	.38	.12	.05	.05	.03
22	.20	.74	18	.60	27	.91	.24	.33	.07	.04	.05	.03
23	.17	.50	11	.54	4.6	.83	.24	.31	.05	.04	.04	.03
24	.16	.38	2.9	.48	2.8	.70	.20	.31	.05	.14	.03	.03
25	.16	.36	2.2	.48	2.0	.62	.18	.42	.22	.07	.18	.03
26	.15	.39	2.1	1.0	1.7	.66	.18	.27	.86	.05	.71	.16
27	.11	.36	1.5	.88	1.7	.58	.18	.22	.11	.05	.08	.24
28	.11	.33	.92	.64	1.4	.62	.39	.21	.14	.04	.05	.05
29	.14	.34	.75	.70	-----	.54	.22	.20	.14	.03	.03	.04
30	3.8	.34	.62	1.0	-----	.44	.21	.18	.08	.04	.03	.04
31	.83	-----	.55	.80	-----	.42	-----	.12	-----	.05	.03	-----
TOTAL	9.32	23.24	60.57	45.52	59.51	64.25	8.77	50.31	3.59	2.22	6.55	1.61
MEAN	.30	.77	1.95	1.47	3.37	2.07	.29	1.62	.12	.072	.21	.054
MAX	3.8	3.7	11	9.0	27	10	.58	12	.86	.24	3.4	.24
MIN	.08	.24	.25	.45	.70	.42	.18	.12	.05	.03	.03	.03
CFSM	.31	.79	1.99	1.50	3.64	2.11	.30	1.65	.12	.07	.21	.06
IN.	.35	.88	2.30	1.73	3.79	2.44	.33	1.91	.14	.08	.25	.06

WTR YR 1971 TOTAL 375.86 MEAN 1.03 MAX 27 MIN .03 CFSM 1.05 IN 14.27

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	0600	2.34	66	2-22	Unknown	-	About 100
12-23	1900	2.17	53	5-7	1900	2.33	65

Note.—No gage-height record Oct. 1-29, Dec. 1 to Mar. 5, Aug. 12-17.

RACCOON CREEK BASIN

93

03201700 Big Four Hollow Creek near Lake Hope, Ohio

LOCATION.--Lat 39°21'48", long 82°16'51" in SE 1/4 NE 1/4 sec. 11, T.11N., R.16W., Vinton County, on right bank 200 ft upstream from State Route 278 crossing, 300 ft upstream from Sandy Run, 2.5 miles southwest of Carbondale, and 3.7 miles northeast of Lake Hope.

DRAINAGE AREA.--1.01 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Altitude of gage is 770.0 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 107 cfs Feb. 22 (gage height, 2.85 ft); minimum daily discharge 0.01 cfs July 6, 7, 8, Sept. 25.

Period of record: Maximum discharge, 107 cfs Feb. 22, 1971 (gage height 2.85 ft); minimum daily discharge 0.01 cfs July 6, 7, 8, Sept. 25, 1971.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.68	.33	.46	.70	1.0	.36	.18	.09	.27	.02	.02
2	.10	3.0	.30	.46	.65	.93	.48	.25	.10	.05	.02	.02
3	.17	2.0	.33	.42	.90	.86	.39	.66	.09	.33	.62	.07
4	.11	.91	.40	13	2.2	.78	.36	.46	.08	.02	2.5	.04
5	.10	.56	.34	3.3	12	.91	.33	.54	.06	.02	.38	.03
6	.09	.44	.30	1.6	3.0	6.0	.33	7.3	.06	.01	.16	.02
7	.09	.36	.27	1.1	1.9	9.8	.31	13	.06	.01	.09	.02
8	.06	.30	.25	.81	1.4	2.2	.28	8.3	.05	.01	.05	.02
9	.07	.25	.25	.81	1.2	1.5	.25	2.8	.05	.02	.05	.02
10	.14	.25	.22	.70	.91	1.8	.24	1.8	.05	.14	.03	.02
11	.20	.21	.38	.66	.88	3.5	.21	1.3	.04	.27	.16	.02
12	.18	.22	4.1	.62	3.3	2.6	.21	1.4	.05	.08	.04	.02
13	.19	.20	1.9	.92	6.2	1.9	.24	2.9	.16	.05	.03	.05
14	.32	1.7	1.1	7.8	2.1	1.5	.24	1.8	.11	.04	.02	.03
15	.34	4.1	.83	2.4	1.4	1.9	.20	1.2	.09	.03	.02	.02
16	.18	1.1	1.1	1.5	1.2	1.5	.20	.96	.06	.26	.02	.05
17	.16	.76	2.6	1.3	1.8	1.1	.20	.88	.05	.06	.02	.04
18	.17	.62	1.6	.91	2.3	.96	.18	.68	.34	.05	.02	.03
19	.18	.50	1.2	.70	2.7	1.1	.16	.54	.34	.07	.02	.03
20	.18	.56	.86	.62	3.2	.98	.16	.40	.03	.03	.02	.04
21	.18	.78	2.9	.60	2.1	.81	.18	.34	.12	.03	.02	.03
22	.19	.64	26	.63	29	.76	.20	.28	.37	.02	.02	.02
23	.16	.48	28	.56	3.8	.72	.18	.24	.04	.03	.02	.02
24	.16	.39	5.8	.49	2.8	.64	.18	.24	.03	.09	.02	.02
25	.16	.34	1.8	.48	1.9	.56	.14	.40	.14	.05	.14	.01
26	.14	.36	1.5	.85	1.6	.54	.14	.24	2.2	.04	.86	.08
27	.12	.35	1.1	.76	1.7	.52	.17	.21	.23	.03	.11	.23
28	.12	.34	.83	.66	1.2	.48	.30	.17	.16	.02	.06	.06
29	.14	.33	.68	.63	---	.48	.22	.16	.23	.02	.05	.05
30	3.4	.36	.60	.95	---	.40	.18	.13	.38	.03	.03	.05
31	1.2	---	.56	.85	---	.36	---	.11	---	.03	.03	---
TOTAL	9.10	23.50	89.45	47.48	94.34	49.11	7.22	49.87	4.62	1.71	5.65	1.15
MEAN	.29	.78	2.89	1.53	3.35	1.58	.24	1.61	.15	.055	.18	.038
MAX	3.4	4.1	28	13	29	9.8	.48	13	2.2	.27	2.5	.20
MIN	.07	.20	.22	.42	.65	.36	.14	.11	.03	.01	.02	.01
CFSM	.29	.77	2.86	1.51	3.33	1.56	.24	1.59	.15	.05	.18	.04
IN.	.34	.87	3.29	1.75	3.46	1.81	.27	1.84	.17	.06	.21	.04

WTR YR 1971 TOTAL 382.95 MEAN 1.35 MAX 29 MIN .01 CFSM 1.04 IN 14.10

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	0600	2.39	70	2-22	0700	2.85	107
12-23	0630	2.35	67	5-7	1900	2.44	76
12-23	1730	2.35	67				

RACCOON CREEK BASIN

03201800 Sandy Run near Lake Hope, Ohio

LOCATION.—Lat 39°20'01", long 82°19'56", in T.11N., R.16W., Vinton County, on right bank at upstream side of bridge on King Hollow Trail, 1,200 ft downstream from Harbarger Hollow, 2.6 miles upstream from spillway of Lake Hope, and 5 miles northeast of Zaleski.

DRAINAGE AREA.—4.99 sq mi.

PERIOD OF RECORD.—October 1957 to current year.

GAGE.—Water-stage recorder. Datum of gage is 715.51 ft above mean sea level.

AVERAGE DISCHARGE.—14 years, 5.58 cfs (15.19 inches per year).

EXTREMES.—Current year: Maximum discharge, about 350 cfs Feb. 22; minimum daily 0.01 cfs Aug. 24.

Period of record: Maximum discharge, 3,770 cfs Aug. 3, 1958 (gage height, 8.41 ft); no flow at times most years.

REMARKS.—Records poor Oct. 1 to Mar. 15, good thereafter. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	1.1	1.2	2.5	3.4	7.4	2.2	1.1	.84	.25	.58	.10
2	.50	0.4	1.1	2.4	3.4	8.4	3.4	1.7	.78	.20	.30	.07
3	.90	7.0	1.1	7.0	3.6	5.2	2.6	5.6	.6	.11	2.4	.24
4	.50	2.4	1.4	3.4	8.4	4.6	2.2	4.0	.50	.11	21	.60
5	.50	1.4	1.7	16	57	4.2	2.0	4.2	.60	.11	2.6	.50
6	.40	1.7	1.4	9.1	18	4.8	2.2	48	.44	.11	.60	.16
7	.40	1.4	1.1	8.2	9.1	18	2.0	59	.58	.10	.28	.11
8	.40	1.2	1.0	4.8	7.4	45	1.8	60	.38	.07	.13	.08
9	.30	1.0	.90	4.6	7.4	15	1.4	20	.25	.08	.10	.06
10	.69	1.1	.80	4.2	5.2	18	1.7	11	.25	.25	.08	.03
11	1.6	1.0	1.6	3.8	5.6	13	1.4	7.6	.20	1.1	.60	.02
12	.90	1.1	35	3.6	6.6	36	1.6	8.8	.54	.25	.16	.05
13	.90	1.2	17	4.4	25	18	1.7	18	1.2	.11	.13	.15
14	2.3	2.2	9.0	25	18	12	1.7	11	3.8	.16	.13	.25
15	3.4	21	7.0	11	8.2	20	1.6	7.4	.78	.07	.13	.11
16	1.7	5.6	9.5	7.4	6.2	11	1.6	6.2	.38	.80	.16	.13
17	1.4	3.4	17	6.4	6.2	7.6	1.6	6.2	.25	.16	.08	.30
18	.80	2.4	12	6.2	11	4.6	1.4	4.6	.20	.08	.06	.20
19	1.0	1.6	8.0	4.2	13	5.4	1.1	3.8	.20	.20	.05	.13
20	.90	4.3	6.0	3.8	16	4.0	1.1	3.0	.20	.10	.03	.16
21	1.1	4.2	20	3.6	12	4.2	1.2	2.4	1.0	.07	.03	.30
22	1.6	3.6	110	3.8	115	4.0	1.2	2.0	.40	.05	.02	.20
23	1.2	2.8	95	3.6	35	3.8	1.1	1.7	.25	.07	.02	.11
24	1.2	2.0	30	3.4	20	3.4	1.0	1.6	.25	.30	.01	.07
25	1.1	1.4	9.0	3.4	17	3.2	.90	2.8	.30	.20	.02	.04
26	.70	1.4	5.8	4.0	15	3.2	.80	1.7	7.2	.11	3.0	.25
27	.60	1.6	4.5	3.6	12	3.0	.90	1.4	1.0	.13	.40	.80
28	.60	1.2	3.8	3.4	9.5	3.2	2.2	1.2	.50	.10	.20	.20
29	.70	1.1	3.3	3.4	-----	2.8	1.4	1.1	.90	.11	.13	.13
30	11	1.4	3.0	4.6	-----	2.4	1.2	1.0	.30	.16	.11	.10
31	2.6	-----	2.7	4.2	-----	2.2	-----	.80	-----	.50	.11	-----
TOTAL	41.69	91.2	421.30	210.0	471.6	284.4	48.80	308.90	24.55	6.16	33.69	5.41
MEAN	1.34	3.64	13.6	6.77	16.8	9.17	1.63	9.96	.82	.20	1.09	.18
MAX	11	21	110	34	115	45	3.4	60	7.2	1.1	21	.60
MIN	.30	1.0	.80	2.4	3.4	2.2	.80	.80	.20	.05	.01	.02
CFSM	.27	.61	2.73	1.36	3.37	1.84	.33	2.00	.16	.04	.22	.04
IN.	.31	.68	3.14	1.57	3.52	2.12	.36	2.30	.18	.05	.25	.04

CAL YR 1970 TOTAL 2,279.64 MEAN 6.25 MAX 15 MIN .10 CFSM 1.25 IN 16.99
 WTR YR 1971 TOTAL 1,947.84 MEAN 5.34 MAX 115 MIN .01 CFSM 1.07 IN 14.52

PEAK DISCHARGE (BASE, 220 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	Unknown	-	About 250	2-22	Unknown	-	About 350
12-23	Unknown	-	About 250	5-7	2115	4.31	262

03202000 Raccoon Creek at Adamsville, Ohio

LOCATION.—Lat 38°52'25", long 82°21'22", in S.E. 1/4 sec. 26, T.6N., R.16W., Gallia County, on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 miles upstream from Ryan Run, and 1.4 miles downstream from Indian Creek.

DRAINAGE AREA.—565 sq mi.

PERIOD OF RECORD.—June 1915 to December 1935, October 1938 to current year. Monthly discharge only for December 1935, published in WSP 1305.

GAGE.—Water-stage recorder. Datum of gage is 570.04 ft above mean sea level. Prior to June 13, 1940, nonrecording gage, June 13, 1940 to Oct. 27, 1970 water-stage recorder 480 ft upstream at same datum.

AVERAGE DISCHARGE.—53 years, 640 cfs (14.89 inches per year).

EXTREMES.—Current year: Maximum discharge, 4,380 cfs Feb. 26 (gage height 16.26 ft); minimum 44 cfs Aug. 25, 26.
Period of records: Maximum discharge, 22,500 cfs May 28, 1968 (gage height 28.69 ft); on basis of velocity-area study of peak flow; minimum, 1.1 cfs Oct. 17-19, 1964.
Flood of January 1937 reached a stage of 25.2 ft, from floodmark (discharge 16,000 cfs).

REMARKS.—Records good. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

GUY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	1,980	295	518	280	1,180	317	163	155	191	84	79
2	168	872	317	474	270	923	320	163	149	22	77	64
3	107	1,040	304	438	270	762	331	167	144	141	140	245
4	86	1,180	280	861	460	711	328	176	133	105	250	470
5	85	1,070	281	1,800	2,000	556	308	193	120	86	500	314
6	79	757	269	1,980	2,380	727	286	328	112	77	600	194
7	74	544	253	1,750	2,420	1,580	275	634	105	70	620	130
8	68	420	238	1,180	2,180	1,890	265	1,610	110	83	400	102
9	61	341	223	746	1,900	1,940	251	2,210	106	61	260	88
10	56	302	212	632	1,600	1,530	242	2,310	96	106	190	78
11	58	272	208	580	1,300	1,600	227	1,990	80	149	160	71
12	126	250	590	516	1,100	1,640	217	1,350	82	221	130	68
13	109	233	801	464	1,300	1,500	211	1,220	91	217	113	70
14	105	226	1,150	1,090	1,700	1,300	217	1,340	140	151	95	81
15	221	452	1,120	1,560	1,400	1,130	233	1,240	163	134	86	79
16	341	588	824	1,910	1,200	1,080	223	1,010	141	106	78	91
17	250	822	773	1,760	1,100	990	214	965	121	86	68	206
18	210	727	918	1,210	1,300	895	205	769	121	86	60	185
19	170	530	1,000	840	1,100	778	197	674	102	184	56	144
20	140	522	909	628	1,100	733	188	544	89	181	53	121
21	163	619	803	500	1,100	720	182	436	81	138	52	105
22	184	641	2,110	500	2,070	678	178	354	74	98	52	89
23	218	544	2,780	468	3,110	684	176	305	74	81	52	78
24	233	492	2,900	440	3,440	550	178	269	72	107	52	71
25	208	394	3,020	420	4,140	502	170	285	67	114	48	64
26	170	334	3,660	390	4,280	468	160	265	182	105	60	1,020
27	155	305	2,780	360	3,970	448	151	253	347	89	179	647
28	142	293	2,400	330	2,630	422	149	245	280	74	135	504
29	158	283	1,310	310	-----	356	155	215	257	95	138	304
30	574	284	720	300	-----	364	166	188	217	107	148	206
31	998	-----	596	290	-----	338	-----	170	-----	105	105	-----
TOTAL	5,942	18,457	33,394	25,315	51,180	29,055	6,720	21,921	4,017	3,730	5,042	5,972
MEAN	192	549	1,077	817	1,628	937	224	707	134	120	163	199
MAX	998	1,180	3,060	1,980	4,280	1,940	331	2,310	347	221	620	1,020
MIN	56	226	208	290	270	338	149	163	67	61	48	64
CFS/IN	.33	.94	1.84	1.40	3.12	1.60	.43	1.21	.23	.21	.29	.34
IN.	.38	1.05	2.12	1.61	3.25	1.65	.43	1.39	.26	.24	.32	.38
CAL YR 1970	TOTAL	251,154	MEAN	680	MAX	5,080	MIN	47	CFSM	1.18	IN	15.97
WTH YR 1971	TOTAL	208,745	MEAN	572	MAX	4,280	MIN	48	CFSM	.98	IN	13.27

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	0400	14.03	3,120	2-26	0100	16.26	4,380

SCIOTO RIVER BASIN

03218000 Little Scioto River above Marion, Ohio

LOCATION.--Lat 40°37'43", long 83°10'11", in NE 1/4 sec. 7, T.5S., R.15E., Marion County on left bank at downstream side of Chesapeake & Ohio Railway bridge, 1 mile downstream from Rock Fork, 3.5 miles northwest of Marion, and 7.2 miles upstream from Honey Creek.

DRAINAGE AREA.--72.4 sq mi.

PERIOD OF RECORD.--January 1938 to September 1971, (discontinued as continuous-record station, converted to a crest-stage partial-record station). Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 909.43 ft above mean sea level. Prior to June 17, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 50.2 cfs (9.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 774 cfs Feb. 23 (gage height, 4.75 ft); minimum, 0.48 cfs Aug. 31, Sept. 1. Period of record: Maximum discharge, 5,160 cfs Jan. 22, 1959 (gage height, 8.73 ft), from rating curve extended above 3,900 cfs; no flow at times.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1143: 1939(M), 1943-45, 1947. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.4	27	13	6.2	166	29	6.4	21	10	2.5	.48
2	2.5	3.9	17	12	6.0	129	31	6.1	23	8.1	1.9	.54
3	1.8	6.0	12	11	6.0	102	29	7.0	23	4.4	1.4	.60
4	1.3	11	19	17	22	82	24	6.7	18	3.2	2.0	.62
5	1.1	7.6	37	114	279	60	21	5.8	15	2.7	1.5	.57
6	1.1	6.1	22	70	253	63	19	344	47	2.3	1.4	3.0
7	1.1	5.0	14	40	110	222	18	503	319	1.9	1.3	16
8	.95	4.1	9.6	28	46	145	18	473	171	1.5	1.0	9.0
9	.89	3.6	8.8	23	36	114	17	333	63	1.6	.89	3.4
10	.93	3.3	8.2	20	28	90	15	198	38	1.8	1.0	2.7
11	.86	2.9	8.0	17	32	85	13	129	28	69	5.4	2.6
12	1.1	3.0	57	16	36	87	12	238	22	255	6.9	2.0
13	8.4	3.2	173	19	44	250	13	267	21	86	5.3	1.5
14	24	2.9	105	30	38	258	15	142	18	35	3.2	1.1
15	16	4.7	62	36	34	246	14	90	14	17	2.2	1.2
16	13	8.5	44	25	30	275	13	69	11	11	1.4	1.1
17	8.9	9.3	47	19	80	164	12	69	9.4	7.6	.94	.86
18	5.8	6.9	55	16	315	114	12	58	8.0	5.9	1.0	.80
19	4.4	5.7	47	14	422	122	11	43	7.1	4.4	.95	.73
20	3.4	6.4	38	12	495	204	9.0	53	6.7	3.9	1.1	4.5
21	4.4	5.7	30	11	342	148	9.4	45	6.3	3.6	.85	6.5
22	5.7	5.2	56	10	430	125	11	31	5.9	2.9	.73	4.6
23	8.1	4.8	139	9.4	725	98	9.8	26	5.4	2.4	.59	3.1
24	6.3	4.4	104	8.6	394	75	9.0	24	4.8	3.7	.52	1.9
25	5.4	4.0	65	8.0	224	65	8.6	156	4.3	7.2	.55	1.5
26	5.0	3.6	46	7.6	337	58	7.4	169	4.4	6.7	.57	1.7
27	4.3	3.8	34	7.2	386	51	6.7	75	4.3	7.7	.53	1.8
28	3.8	4.4	26	7.0	275	47	7.0	49	3.7	7.1	.57	1.8
29	3.7	5.7	22	6.8	-----	43	7.4	38	3.2	4.1	.55	1.4
30	3.3	19	19	6.6	-----	36	6.7	32	3.2	3.3	.53	1.3
31	3.4	-----	15	6.4	-----	30	-----	26	-----	3.0	.51	-----
TOTAL	153.83	168.1	1,366.6	640.6	5,431.2	3,754	428.0	3,712.0	928.7	584.0	49.78	78.90
MEAN	4.96	5.60	44.1	20.7	194	121	14.3	120	31.0	18.8	1.61	2.63
MAX	24	19	173	114	725	275	31	503	319	255	6.9	16
MIN	.86	2.9	8.0	6.4	6.0	30	6.7	5.8	3.2	1.5	.51	.48
CFSM	.07	.08	.61	.29	2.68	1.67	.20	1.66	.43	.26	.02	.04
IN.	.08	.09	.70	.33	2.79	1.93	.22	1.91	.48	.30	.03	.04

CAL YR 1970 TOTAL 22,057.64 MEAN 60.4 MAX 931 MIN .57 CFSM .83 IN 11.33
WTR YR 1971 TOTAL 17,295.71 MEAN 47.4 MAX 725 MIN .48 CFSM .65 IN 8.89

PEAK DISCHARGE (BASE, 570 CFS).--Feb. 23 (1930) 774 cfs (4.75 ft).

03219500 Scioto River near Prospect, Ohio

LOCATION.—Lat 40°25'10", long 83°11'50", Delaware County, on downstream side of pier of Hoskins Bridge, 1.5 miles upstream from Ottawa Creek, 2 miles south of Prospect, and 2.5 miles downstream from Patton Run.

DRAINAGE AREA.—567 sq mi.

PERIOD OF RECORD.—July 1925 to October 1932, October 1939 to current year. Published as "at Prospect" 1925-32. Gage-height records collected in this vicinity since 1915 are contained in reports of U.S. Weather Bureau.

GAGE.—Water-stage recorder. Datum of gage is 886.9 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 miles upstream at datum 4.8 ft higher. Oct. 16 to Dec. 5, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.—39 years, 440 cfs (10.54 inches per year).

EXTREMES.—Current year: Maximum discharge 4,550 cfs Feb. 24 (gage height, 10.32 ft); minimum, 14 cfs Sept. 5, 6, 20.

Period of record: Maximum discharge, 10,100 cfs Mar. 22, 1927, Jan. 21, 1959 (gage heights, 15.0 ft, from graph based on gage readings, site and datum then in use, 15.30 ft, respectively); minimum, 3.5 cfs Sept. 13, 1953.

Flood of March 25, 1913 reached a stage of 21.1 ft, original site and datum (discharge, 27,000 cfs, computed by Franklin County Conservancy District).

REMARKS.—Records good except those for the winter period, which are fair. Some diurnal fluctuation at low flow caused by power-plant 5.4 miles upstream from station. Water-quality record for the current year are published in Part 2 of this report.

REVISIONS.—WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	61	98	50	1,720	248	87	170	190	74	19
2	28	25	71	90	48	1,140	246	85	166	144	60	17
3	27	38	63	84	46	814	241	94	186	128	55	18
4	22	34	77	140	70	622	243	84	596	100	52	18
5	19	34	79	516	660	488	226	82	658	79	46	16
6	20	34	93	596	1,100	449	201	934	421	67	40	17
7	22	34	74	480	1,200	862	188	1,870	435	58	37	97
8	21	33	63	340	1,000	1,110	181	2,690	537	51	31	74
9	20	26	55	240	540	830	172	2,910	329	51	28	48
10	24	27	51	190	360	658	158	2,640	224	56	29	37
11	25	27	51	160	220	642	144	1,690	172	97	52	65
12	25	26	108	130	170	654	135	1,230	144	654	41	38
13	66	27	348	110	200	1,120	135	1,500	175	1,220	72	34
14	59	29	586	100	320	1,630	143	1,310	394	1,350	75	27
15	64	37	414	120	440	2,010	154	826	894	714	50	21
16	53	36	255	140	200	2,180	186	565	561	296	35	19
17	44	34	220	120	160	2,010	179	442	291	188	30	19
18	40	37	235	110	700	1,560	162	376	199	134	26	18
19	34	36	249	100	1,600	1,070	146	309	148	107	23	15
20	30	36	225	90	3,100	1,120	134	289	122	94	26	21
21	39	40	188	82	2,550	1,180	125	263	105	82	27	51
22	35	34	230	76	3,500	982	125	222	94	72	21	36
23	29	35	568	70	4,010	858	123	186	82	62	20	38
24	31	39	794	66	4,430	722	122	168	55	76	19	33
25	30	37	630	64	3,780	575	110	224	55	88	20	28
26	27	35	318	60	2,410	488	103	634	96	154	19	30
27	25	34	240	58	2,050	421	93	646	388	201	30	32
28	25	34	190	56	2,010	379	94	400	630	177	25	30
29	25	34	160	54	-----	349	90	291	352	168	18	30
30	27	51	130	52	-----	315	87	234	226	123	16	27
31	25	-----	110	50	-----	276	-----	197	-----	94	19	-----
TOTAL	994	1,005	6,936	4,642	36,924	29,234	4,694	23,478	8,905	7,075	1,116	973
MEAN	32.1	33.5	224	150	1,319	943	156	757	297	228	36.0	32.4
MAX	66	51	794	596	4,430	2,180	248	2,910	894	1,350	75	97
MIN	19	22	51	50	46	276	87	82	55	51	16	15
CFSM	.06	.06	.40	.26	2.33	1.66	.28	1.34	.52	.40	.06	.06
IN.	.07	.07	.46	.30	2.42	1.92	.31	1.54	.58	.46	.07	.06

CAL YR 1970 TOTAL 161,172 MEAN 442 MAX 5,730 MIN 17 CFSM .78 IN 10.57
WTR YR 1971 TOTAL 125,976 MEAN 345 MAX 4,430 MIN 15 CFSM .61 IN 8.27

PEAK DISCHARGE (BASE, 3,600 CFS).—Feb. 24 (1400) 4,550 cfs (10.32 ft).

SCIOTO RIVER BASIN

03220000 Mill Creek near Bellepoint, Ohio

LOCATION.—Lat 40°14'54", long 83°10'26", Delaware County, on left bank at upstream side of county bridge, 1.2 miles west of Bellepoint, 1.5 miles upstream from mouth, and 2.3 miles downstream from Blues Creek.

DRAINAGE AREA.—178 sq mi.

PERIOD OF RECORD.—October 1942 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.—Water-stage recorder. Datum of gage is 865.14 ft above mean sea level, adjustment of 1912 (levels by students of Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage, at same site and datum.

AVERAGE DISCHARGE.—29 years, 145 cfs (11.06 inches per year).

EXTREMES.—Current year: Maximum discharge, 3,100 cfs Feb. 23; minimum 0.68 cfs Aug. 26, 27.

Period of record: Maximum discharge, 20,300 cfs Jan. 21, 1959 (gage height, 13.85 ft), from rating curve extended above 14,000 cfs; no flow Sept. 25, 26, 1944, Sept. 19, 1948.

Flood of March 1913 reached a stage of 18.0 ft.

REMARKS.—Records good except those for the winter period, which are fair. Diurnal fluctuation caused by stone quarry upstream from station. Water-quality records for current year are published in Part 2 of this report.

REVISIONS.—WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	9.2	10	15	8.4	242	48	19	18	38	3.8	1.9
2	5.3	9.2	9.2	13	8.2	170	55	20	17	27	3.4	1.0
3	5.8	10	9.2	12	8.0	130	55	23	20	48	4.0	2.4
4	3.8	15	13	120	45	88	53	25	74	28	3.6	4.4
5	4.4	10	16	600	850	80	45	20	49	17	5.3	4.4
6	4.4	9.2	20	170	900	120	42	116	30	15	6.2	5.3
7	3.6	7.5	18	100	250	750	40	270	22	11	3.8	5.8
8	3.8	7.1	13	86	160	340	38	461	19	10	2.8	10
9	4.9	6.2	11	60	140	140	34	394	15	9.2	2.6	7.1
10	8.0	6.2	8.2	40	120	140	32	165	13	10	3.2	4.0
11	8.4	5.3	9.2	34	110	150	27	100	12	11	1.8	4.9
12	14	7.1	34	32	100	261	24	101	10	9.2	1.6	5.1
13	19	7.5	243	29	120	912	25	386	26	10	2.6	5.8
14	26	9.2	157	31	150	710	32	157	62	7.1	2.8	6.2
15	14	11	73	43	180	539	29	88	64	8.4	2.2	3.2
16	13	12	48	50	120	700	27	60	29	8.4	1.8	2.6
17	12	11	53	28	160	322	27	55	17	6.2	2.6	4.0
18	8.4	7.5	127	22	700	199	24	59	12	4.4	1.6	3.8
19	8.4	8.0	87	20	1,000	175	21	44	10	4.4	1.0	3.8
20	7.1	12	55	18	1,500	340	20	37	7.5	3.8	1.5	6.2
21	7.5	12	45	17	988	262	20	45	6.2	4.9	3.2	9.2
22	16	12	103	16	2,010	286	23	39	5.3	3.4	6.2	10
23	13	10	496	16	2,750	258	21	28	4.4	3.4	3.6	5.3
24	9.2	9.4	310	16	632	173	19	24	4.9	6.2	3.0	3.4
25	8.0	8.8	100	16	259	123	18	32	15	17	1.7	3.4
26	8.0	8.4	50	14	497	102	17	44	1,340	11	.95	5.8
27	8.4	9.2	40	12	901	87	16	59	790	7.5	.95	11
28	6.2	9.2	33	10	479	74	17	40	212	5.8	2.7	10
29	6.2	7.1	28	9.6	-----	67	19	30	111	4.9	2.2	5.8
30	8.4	8.0	22	9.2	-----	61	19	24	58	5.8	2.2	4.0
31	8.0	-----	18	8.8	-----	52	-----	20	-----	4.4	1.8	-----
TOTAL	276.0	274.3	2,258.8	1,667.6	15,144.6	8,053	887	2,985	3,074.3	360.4	86.70	160.0
MEAN	8.90	9.14	72.9	53.8	541	260	29.6	98.3	102	11.6	2.80	5.33
MAX	26	15	496	600	2,750	912	55	461	1,340	48	6.2	11
MIN	2.8	5.3	8.2	8.8	8.0	52	16	19	4.4	3.4	.95	1.0
CFSM	.05	.05	.41	.30	3.04	1.46	.17	.54	.57	.07	.02	.03
IN.	.06	.06	.47	.35	3.17	1.68	.19	.62	.64	.08	.02	.03

CAL YR 1970 TOTAL 51,148.10 MEAN 143 MAX 5,300 MIN 2.3 CFSM .79 IN 10.69
WTR YR 1971 TOTAL 35,227.70 MEAN 96.5 MAX 2,750 MIN .95 CFSM .54 IN 7.36

PEAK DISCHARGE (BASE, 2,500 CFS).—Feb. 23 (0130) 3,100 cfs (6.67 ft).

SCIOTO RIVER BASIN

99

03221000 Scioto River below O'Shaughnessy Dam, near Dublin, Ohio

LOCATION.—Lat 40°08'36", long 83°07'14", Delaware County, on left bank, 0.2 mile north of county line, 0.6 mile downstream from O'Shaughnessy Dam, and 3 miles north of Dublin.

DRAINAGE AREA.—980 sq mi.

PERIOD OF RECORD.—April 1921 to current year.

GAGE.—Water-stage recorder. Datum of gage is 775.00 ft above mean sea level, adjustment of 1912. Prior to Aug. 26, 1921, nonrecording gage at site 0.8 mile upstream at same datum. Aug. 26, 1921, to Oct. 13, 1924, nonrecording gage at site 100 ft downstream at same datum.

AVERAGE DISCHARGE.—50 years, 763 cfs.

EXTREMES.—Current year: Maximum discharge, 11,700 cfs Feb. 22 (gage height, 10.78 ft); minimum, 10 cfs Nov. 8, 1924. Period of record: Maximum discharge, 55,200 cfs Jan. 22, 1959 (gage height, 22.04 ft, from floodmark); minimum, 0.4 cfs Nov. 8, 1924.

Flood of March 25, 1913 reached a stage of 24.6 ft (discharge, 74,500 cfs at Griggs Dam, 9 miles downstream from gage, computed by C. E. Sherman, Ohio State University).

REMARKS.—Records good. Flow regulated by O'Shaughnessy Reservoir 0.8 mile upstream since 1924 (see sta. 03220500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	81	68	160	54	2,700	400	135	253	339	105	73
2	54	45	87	140	52	1,920	385	167	241	281	87	73
3	54	12	105	130	50	1,390	375	160	257	251	90	70
4	53	12	125	340	137	964	375	132	450	221	102	70
5	53	13	107	1,340	1,740	764	362	139	804	167	75	68
6	51	13	127	1,000	2,380	780	339	740	639	139	63	70
7	51	14	128	580	1,820	1,970	277	2,550	554	108	53	68
8	51	12	110	460	1,270	2,030	281	3,800	625	90	46	36
9	51	12	98	380	724	1,420	285	4,280	486	93	43	20
10	51	14	90	320	475	1,100	249	3,610	335	87	39	17
11	49	16	91	280	380	1,040	233	2,460	261	111	45	19
12	50	74	144	240	362	1,200	221	1,670	221	195	37	19
13	51	131	632	210	371	2,660	253	2,300	269	1,000	36	36
14	52	116	1,040	210	425	3,450	209	1,980	536	1,380	46	68
15	57	53	764	219	530	3,480	221	1,330	991	1,040	81	68
16	57	20	490	231	497	4,110	245	874	847	470	63	65
17	56	20	390	251	542	3,160	269	653	470	285	45	68
18	38	21	478	191	1,550	2,380	253	542	317	195	50	68
19	14	21	496	160	3,190	1,730	221	465	241	167	65	68
20	19	25	406	140	5,770	1,880	209	420	195	117	63	46
21	24	30	345	120	5,510	1,920	205	400	181	99	70	36
22	19	51	424	110	8,450	1,730	191	357	132	90	120	70
23	17	53	1,320	110	10,800	1,520	184	299	117	78	93	70
24	19	41	1,670	100	7,460	1,210	188	273	102	139	65	70
25	21	42	1,170	100	5,370	928	167	317	114	123	73	70
26	22	52	646	96	4,140	764	174	470	1,850	126	78	70
27	48	59	400	70	4,340	646	135	847	1,540	170	43	36
28	89	80	320	68	3,590	584	156	611	1,160	195	25	19
29	90	50	260	66	-----	530	139	435	700	198	23	20
30	84	62	220	60	-----	486	139	348	440	181	53	20
31	83	-----	180	56	-----	430	-----	281	-----	135	78	-----
TOTAL	1,482	1,245	12,931	7,938	71,979	50,876	7,340	33,045	15,328	8,280	1,955	1,571
MEAN	47.8	41.5	417	256	2,571	1,641	245	1,066	511	267	63.1	52.4
MAX	90	131	1,670	1,340	10,800	4,110	400	4,280	1,850	1,380	120	73
MIN	14	12	68	56	50	430	135	132	102	78	23	17
CAL YR 1970	TOTAL 300,716	MEAN 824	MAX 13,600	MIN 12								
WTR YR 1971	TOTAL 213,970	MEAN 586	MAX 10,800	MIN 12								

03223000 Olentangy River at Claridon, Ohio

LOCATION.--Lat 40°34'58", long 82°59'20", in NW 1/4 sec. 26, T.5S., R.16E., Marion County, on left bank 900 ft downstream from bridge on State Highway 95, 0.5 mile east of Claridon, 0.8 mile downstream from Otter Creek, and 1.4 miles upstream from Beaver Run.

DRAINAGE AREA.--157 sq mi.

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft above mean sea level. (Levels by Corps of Engineers). Prior to Aug. 18, 1969 water stage recorder at site 1000 ft upstream at same datum.

AVERAGE DISCHARGE.--25 years, 144 cfs (12.46 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,900 cfs Feb. 23 (gage height 9.04 ft); minimum, 2.3 cfs Oct. 9, 10.

Period of record: Maximum discharge, 14,900 cfs Jan. 22, 1959 (gage height, 16.77 ft), from rating curve extended above 4,700 cfs on basis of contracted-opening measurement of peak flow; no flow Oct. 2-26, 1953, Sept. 14-22, 1955.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1235: 1947, 1946(P). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	179	42	15	319	71	20	35	28	7.9	6.3
2	7.6	25	107	40	14	238	78	20	33	19	7.1	5.4
3	6.4	67	76	36	14	194	96	20	33	14	6.5	5.4
4	5.0	113	92	167	75	147	88	19	37	9.7	6.5	5.4
5	4.6	65	166	430	1,000	124	69	19	32	7.7	5.8	4.8
6	4.2	44	111	259	300	138	63	625	29	6.9	5.4	5.8
7	3.5	34	72	160	160	466	58	1,470	109	5.8	5.2	9.2
8	3.2	27	53	110	100	384	52	1,580	134	5.0	4.8	7.3
9	2.7	22	45	76	80	220	49	733	68	4.8	4.5	7.7
10	2.5	19	41	60	62	190	44	335	44	5.0	32	8.6
11	2.6	16	39	48	68	186	39	210	33	29	792	6.3
12	3.1	15	257	44	76	208	36	251	28	245	364	5.0
13	26	15	670	40	100	520	36	339	26	145	128	5.6
14	152	15	498	60	90	586	39	211	30	57	62	8.6
15	107	24	243	90	84	530	45	141	24	28	35	13
16	122	55	163	58	80	640	44	109	20	17	23	12
17	66	72	153	48	200	394	40	213	17	13	17	8.4
18	37	50	169	40	556	238	38	235	15	11	13	6.3
19	25	38	155	34	915	208	33	128	14	9.7	10	5.0
20	18	34	125	30	1,580	251	30	127	14	9.4	9.0	7.1
21	17	32	99	26	1,500	239	30	113	13	7.7	9.4	11
22	21	31	177	24	1,260	238	30	82	12	7.7	10	22
23	39	33	451	22	1,820	226	29	61	11	6.5	9.7	14
24	36	28	358	21	1,400	172	28	52	11	11	6.5	8.8
25	26	23	183	20	460	145	26	79	10	23	5.8	6.5
26	19	19	100	19	620	139	24	136	9.9	45	6.3	6.3
27	16	19	72	18	816	121	21	107	9.9	21	13	6.0
28	13	20	62	17	586	109	21	72	9.2	20	23	5.8
29	11	27	54	16	-----	101	21	56	14	15	17	5.8
30	11	138	50	16	-----	89	21	47	13	10	11	5.4
31	12	-----	46	15	-----	78	-----	41	-----	9.4	7.7	-----
TOTAL	830.4	1,133	5,066	2,086	14,031	7,838	1,299	7,651	888.0	846.3	1,658.1	234.8
MEAN	26.8	37.8	163	67.3	501	253	43.3	247	29.6	27.3	53.5	7.83
MAX	152	138	670	430	1,820	640	96	1,580	134	245	792	22
MIN	2.5	13	39	15	14	78	21	19	9.2	4.8	4.5	4.8
CFSM	.17	.24	1.04	.43	3.19	1.61	.28	1.57	.19	.17	.34	.05
IN.	.20	.27	1.20	.49	3.32	1.86	.31	1.81	.21	.20	.39	.06
CAL YR 1970 TOTAL	61,150.3	MEAN 168	MAX 2,340	MIN 2.5	CFSM 1.07	IN 14.49						
WTR YR 1971 TOTAL	43,561.6	MEAN 119	MAX 1,820	MIN 2.5	CFSM .76	IN 10.32						

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	2000	8.79	1,750	5-8	0130	8.90	1,820
2-23	1530	9.04	1,900				

03224500 Whetstone Creek near Ashley, Ohio

LOCATION.--Lat 40°27'18", long 82°57'28", in NW 1/4 sec. 19, T.7N., R.10W., Morrow County, on left bank 800 ft upstream from bridge on State Highway 746, 400 ft upstream from unnamed right bank tributary, 0.6 mile downstream from Shaw Creek, and 3.2 miles north of Ashley.

DRAINAGE AREA.--98.7 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 942.35 ft above mean sea level, (levels by Corps of Engineers).

AVERAGE DISCHARGE.--17 years, 91.9 cfs (12.64 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,740 cfs Feb. 23 (gage height, 6.49 ft); minimum, 1.7 cfs Aug. 25, 26.
Period of record: Maximum discharge, 19,100 cfs Jan. 21, 1959 (gage height, 14.34 ft), from rating curve extended above 3,900 cfs on basis of slope-area measurement of peak flow; no flow for many days in 1954-55, and part of Oct. 3, 1963.

REMARKS.--Records good except those for the winter period which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	18	39	24	9.0	163	44	18	21	7.5	4.8	3.1
2	9.2	26	21	23	9.0	133	67	20	21	6.8	4.1	2.8
3	9.4	38	17	22	8.8	108	80	21	24	5.5	6.2	2.3
4	8.9	21	35	153	50	84	58	20	22	4.8	7.8	2.3
5	8.6	12	41	330	400	73	48	22	19	4.1	8.8	2.0
6	8.1	10	23	163	250	97	43	792	23	3.7	6.5	1.9
7	7.8	9.5	16	120	120	396	39	540	32	3.4	4.8	2.9
8	7.9	8.9	12	70	64	165	36	664	21	3.2	3.4	3.1
9	7.4	8.3	11	42	50	133	34	333	17	3.7	2.8	2.6
10	7.2	8.1	11	33	36	106	31	151	14	4.6	2.5	2.2
11	7.9	7.8	12	28	40	111	27	103	13	5.3	54	2.6
12	8.5	7.9	270	25	44	133	26	198	12	15	34	1.1
13	23	7.9	560	23	60	379	27	208	22	14	13	2.8
14	27	8.5	185	40	58	326	32	111	21	7.5	7.2	5.0
15	25	11	109	50	54	344	34	79	14	5.5	5.0	5.0
16	21	21	77	34	50	424	29	63	11	4.4	3.9	3.9
17	19	15	79	28	80	193	28	124	10	3.4	3.2	3.4
18	17	12	80	22	160	144	26	90	8.8	3.2	2.6	2.9
19	16	11	67	18	350	139	24	59	8.1	3.1	2.3	2.5
20	14	11	58	16	720	181	23	49	7.8	3.2	2.5	3.9
21	19	11	49	14	386	137	23	43	7.8	5.0	2.6	11
22	23	14	137	13	660	153	23	35	7.5	3.9	2.9	8.5
23	25	11	330	13	1,340	123	22	31	6.8	3.1	2.5	6.5
24	23	10	157	12	372	98	21	29	6.5	10	2.0	4.4
25	20	9.2	83	12	195	90	20	63	6.2	26	1.9	3.4
26	18	8.8	62	11	452	83	18	81	6.5	15	1.9	3.2
27	16	9.1	48	11	516	73	18	48	6.8	20	7.2	3.9
28	15	9.5	38	10	269	67	20	38	6.2	10	13	4.1
29	14	10	32	10	-----	62	20	32	5.5	7.5	7.8	3.2
30	16	46	29	9.6	-----	54	18	28	7.2	5.5	5.0	3.2
31	18	-----	26	9.2	-----	47	-----	24	-----	5.0	3.9	-----
TOTAL	469.4	411.5	2,714	1,388.8	6,796.8	4,819	959	4,117	408.7	223.1	230.1	111.7
MEAN	15.1	13.7	87.5	44.8	243	155	32.0	133	13.6	7.20	7.42	3.72
MAX	27	46	560	330	1,340	424	80	792	32	26	54	11
MIN	7.2	7.8	11	9.2	8.8	47	18	18	5.5	3.1	1.9	1.9
CFSM	.15	.14	.89	.45	2.46	1.57	.32	1.35	.14	.07	.08	.04
IN.	.18	.16	1.02	.52	2.56	1.82	.36	1.55	.15	.08	.09	.04

CAL YR 1970 TOTAL 43,010.6 MEAN 118 MAX 3,450 MIN 5.5 CFSM 1.20 IN 16.21
WTR YR 1971 TOTAL 22,649.1 MEAN 62.1 MAX 1,340 MIN 1.9 CFSM .63 IN 8.54

PEAK DISCHARGE (BASE, 1,800 CFS).--No peaks above base.

SCIOTO RIVER BASIN

03225500 Olentangy River near Delaware, Ohio

LOCATION.—Lat 40°21'18", long 83°04'02", NE 1/4 T.5N., R.19W., Delaware County, on left bank 1,000 ft downstream from Delaware Dam, 500 ft upstream from highway bridge, 1,300 ft upstream from Norfolk & Western Railway bridge, and 4 miles north of Delaware.

DRAINAGE AREA.—393 sq mi.

PERIOD OF RECORD.—October 1923 to September 1934, April 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.—Water-stage recorder and concrete control. Datum of gage is 799.58 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1950, water-stage recorder at site 500 ft downstream at datum 76.7 ft higher.

AVERAGE DISCHARGE.—44 years, 336 cfs.

EXTREMES.—Current year: Maximum discharge, 4,130 cfs Feb. 25 (gage height, 86.63 ft); minimum, 3.3 cfs Aug. 6 (gage height, 79.42 ft).

Period of record: Maximum discharge, 14,100 cfs Mar. 21, 1927 (gage height, 16.9 ft, site and datum then in use); minimum 0.1 cfs Aug. 20, 1930, Sept. 14-29, 1934.

REMARKS.—Records good. Flow completely regulated by Delaware Reservoir since 1951 (see sta. 03225000). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	126	132	33	1,060	87	15	69	12	41	24
2	13	14	206	129	33	689	13	15	50	12	43	21
3	12	14	226	129	33	605	13	13	126	12	43	21
4	12	14	226	201	39	305	12	13	93	12	43	21
5	12	14	226	734	714	196	12	17	62	12	60	21
6	12	14	220	702	1,560	287	12	772	62	12	37	21
7	12	14	182	341	1,000	869	12	1,150	64	12	43	20
8	464	14	113	201	534	1,420	12	1,140	206	12	41	20
9	89	14	91	132	164	753	12	1,700	270	12	41	20
10	12	14	65	136	129	444	12	3,250	160	12	41	21
11	12	14	56	136	177	444	12	2,940	42	24	41	21
12	12	14	191	136	201	451	12	1,150	33	28	152	21
13	12	14	1,040	136	201	811	12	837	34	136	253	21
14	12	15	1,170	136	196	1,560	12	502	114	206	220	21
15	287	15	702	136	196	1,730	11	489	116	113	96	21
16	311	275	341	136	196	1,710	12	311	67	74	46	21
17	177	386	323	132	215	1,180	11	226	49	52	43	21
18	12	341	305	132	425	682	10	323	37	34	43	21
19	10	299	287	132	1,100	489	34	367	32	34	43	21
20	12	242	281	91	2,200	547	14	367	32	34	44	21
21	13	220	215	69	2,700	586	12	299	32	35	39	21
22	13	220	253	69	2,670	586	13	220	19	36	37	20
23	13	220	798	69	2,470	586	12	182	13	36	37	20
24	13	152	849	69	3,620	483	11	126	12	37	37	20
25	13	85	650	69	3,900	299	11	103	12	35	37	20
26	13	67	177	46	2,580	237	12	220	16	35	37	21
27	13	67	89	32	2,050	237	36	270	13	35	37	20
28	13	67	132	32	1,990	242	15	210	12	35	37	20
29	14	67	132	32	-----	242	15	136	13	35	37	21
30	14	67	132	32	-----	237	15	103	12	35	37	20
31	14	-----	132	33	-----	237	-----	103	-----	35	37	-----
TOTAL	1,654	2,987	9,936	4,692	31,326	20,204	489	17,569	1,877	1,244	1,823	623
MEAN	53.4	99.6	321	151	1,119	652	16.3	567	62.6	40.1	58.8	20.8
MAX	464	386	1,170	734	3,900	1,730	87	3,250	270	206	253	24
MIN	10	14	56	32	33	196	10	13	12	12	37	20

CAL YR 1970 TOTAL 146,387.6 MEAN 401 MAX 4,000 MIN 9.6
WTR YR 1971 TOTAL 94,424.0 MEAN 259 MAX 3,900 MIN 10

SCIOTO RIVER BASIN

103

03226800 Olentangy River near Worthington, Ohio

LOCATION.--Lat 40°06'37", long 83°01'55", in NW 1/4 T.2N., R.18W., Franklin County, on left bank 350 ft downstream from Interstate Highway 270 bridge, 2.8 miles upstream from Rush Run, and 1.5 miles northwest of Worthington.

DRAINAGE AREA.--497 sq mi.

RECORDS AVAILABLE.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 411 cfs.

EXTREMES.--Current year: Maximum discharge, 4,340 cfs Feb. 22; maximum gage height 7.78 ft Feb. 6 (backwater from ice jam); minimum daily, 13 cfs June 25.

Period of record: Maximum discharge, 16,500 cfs Jan. 21, 1959 (gage height, 15.68 ft, from high-water mark in well); minimum, 7.6 cfs Oct. 8, 9, 1964.

Flood in January 1957 reached a stage of 15.3 ft, from information by Corps of Engineers, (discharge, 15,100 cfs).

REMARKS.--Records poor prior to Dec. 2, fair during the winter period, and good thereafter. Flow regulated by Delaware Reservoir 21 miles upstream (see sta. 03225000).

REVISIONS (WATER YEARS).--WSP 1625: 1952(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	23	150	110	36	1,340	205	26	106	28	40	34
2	16	44	176	110	36	774	74	25	67	23	41	30
3	15	35	220	120	36	774	54	34	72	20	58	22
4	15	23	252	285	50	512	45	30	139	17	60	26
5	15	22	238	575	1,000	239	41	25	74	15	52	23
6	15	21	224	896	2,100	629	37	629	82	15	55	30
7	15	20	216	555	1,160	992	38	1,290	76	14	40	40
8	900	19	159	360	810	1,420	37	1,330	89	14	41	29
9	471	18	108	240	119	992	34	1,340	222	14	41	21
10	36	18	100	180	110	520	32	2,700	210	15	41	21
11	25	18	67	180	180	534	31	3,170	92	21	42	21
12	31	18	141	180	250	646	30	1,310	48	26	43	26
13	37	19	750	166	330	960	29	945	51	28	176	22
14	28	19	1,290	170	261	1,510	38	555	94	143	218	25
15	350	19	872	150	249	1,780	36	598	129	165	157	21
16	486	107	532	136	239	1,690	32	330	101	80	73	21
17	320	430	290	140	393	1,330	31	258	58	70	46	21
18	25	376	332	132	618	840	29	258	49	50	41	20
19	21	340	295	120	1,350	632	27	341	42	37	38	19
20	22	310	240	96	2,350	597	43	341	33	34	45	38
21	23	280	270	78	2,550	688	31	309	32	34	46	54
22	22	280	315	76	3,710	667	30	244	31	33	40	26
23	22	280	680	76	2,860	660	29	172	28	33	36	22
24	22	190	1,040	76	3,150	569	27	165	15	80	32	21
25	22	115	864	74	3,780	393	22	158	13	68	33	21
26	25	78	414	45	2,950	258	21	155	851	46	50	37
27	24	78	88	37	2,110	253	21	253	152	46	82	50
28	22	78	112	36	2,020	249	43	239	72	48	42	28
29	22	78	133	36	-----	249	28	175	58	43	38	25
30	27	110	110	36	-----	239	26	116	38	41	37	26
31	30	-----	110	36	-----	235	-----	108	-----	41	34	-----
TOTAL	3,120	3,466	10,838	5,507	34,807	23,171	1,201	17,629	3,124	1,342	1,818	820
MEAN	101	116	350	178	1,243	747	40.0	569	104	43.3	58.6	27.3
MAX	900	430	1,290	896	3,780	1,780	205	3,170	851	165	218	54
MIN	15	18	67	36	36	235	21	25	13	14	32	19

CAL YR 1970 TOTAL 183,332 MEAN 502 MAX 4,700 MIN 12
WTR YR 1971 TOTAL 106,843 MEAN 293 MAX 3,780 MIN 13

Note.--No gage-height record Oct. 1-8, 11, 12, Oct. 16 to Nov. 15, Nov. 19-24, Nov. 27 to Dec. 1, Jan. 8-10.

SCIOTO RIVER BASIN

03227500 Scioto River at Columbus, Ohio

LOCATION.--Lat 39°54'34", long 83°00'33", Franklin County, on right bank at sewage-treatment works of city of Columbus, 0.4 miles downstream from bridge on Frank Road, 2.6 miles upstream from Scioto Big Run, and 5 miles downstream from Olentangy River.

DRAINAGE AREA.--1,629 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft above mean sea level. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--51 years, 1,338 cfs.

EXTREMES.--Current year: Maximum discharge, 15,900 cfs Feb. 23 (gage height, 18.22 ft); minimum, 63 cfs Oct. 4.
Period of record: Maximum discharge, 68,200 cfs Jan. 22, 1959 (gage height, 27.22 ft, from high-water mark in well, from rating curve extended above 46,000 cfs; minimum, 42 cfs Sept. 6, 1930.
Flood of Mar. 25, 1913 reached a stage of 25.9 ft (discharge, 138,000 cfs, estimated by Franklin County Conservancy District).

REMARKS.--Records good. Flow regulated by O'Shaughnessy Reservoir 20.4 miles upstream (see Sta. 03220500), Griggs Reservoir 10.4 miles upstream (see Sta. 03221500), and Delaware Reservoir 35 miles upstream from station (see Sta. 03225000). Records include only part of sewage return flow for city of Columbus. Water supply for city of Columbus is obtained from Scioto River downstream from Griggs Dam, Big Walnut Creek below Central College, and from well field in Alum Creek basin. For statement on diversions from Alum Creek basin and Big Walnut Creek, see REMARKS for stations 03229000 and 03229500. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 743: 1927(M). WSP 803: 1922-24, 1926-30, 1932-33. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	140	187	413	158	5,000	804	205	461	840	257	180
2	148	637	202	394	133	3,280	750	252	422	552	230	185
3	130	305	245	364	135	2,670	582	356	395	373	268	296
4	88	205	438	1,270	731	1,940	546	252	461	351	422	200
5	101	169	507	1,620	2,520	1,330	522	220	822	285	323	150
6	130	164	420	2,550	3,760	1,600	510	961	846	235	230	268
7	150	148	416	1,610	3,740	3,370	466	3,710	756	190	225	488
8	138	129	405	962	2,450	4,020	422	5,500	714	155	190	230
9	535	149	350	797	1,340	3,260	428	5,710	822	160	205	180
10	316	151	286	670	819	2,070	411	6,410	726	274	220	170
11	143	143	260	643	693	1,930	356	6,620	528	477	235	180
12	141	152	317	552	836	2,150	356	3,860	378	285	220	155
13	367	159	832	519	1,080	3,460	351	3,180	351	600	268	195
14	294	231	1,560	540	668	5,210	411	2,970	588	1,310	433	215
15	241	330	2,410	480	821	5,870	356	2,330	852	1,450	406	160
16	387	206	1,690	452	889	6,290	356	1,530	1,130	1,010	323	180
17	456	408	1,300	488	1,020	5,460	378	1,240	780	528	246	175
18	331	530	913	433	2,220	3,890	389	947	499	395	220	135
19	159	480	989	409	4,120	2,970	351	961	364	296	220	125
20	200	506	923	363	7,910	2,590	334	926	318	263	373	570
21	288	379	827	333	8,840	2,890	329	864	301	190	279	356
22	176	339	1,140	288	11,500	2,720	312	738	268	185	210	185
23	172	335	1,430	283	14,200	2,540	290	612	205	175	200	160
24	146	334	2,780	280	11,500	2,180	279	546	180	961	205	150
25	127	286	2,590	282	9,870	1,690	268	933	225	494	235	135
26	146	218	1,850	273	8,620	1,290	241	606	3,580	290	528	373
27	154	182	971	204	7,410	1,120	246	982	2,100	263	1,060	296
28	155	174	614	178	6,720	1,040	334	1,090	1,460	318	263	210
29	185	249	596	207	-----	975	263	816	1,330	444	185	190
30	199	264	529	231	-----	905	220	624	750	340	165	185
31	154	-----	449	174	-----	840	-----	499	-----	323	180	-----
TOTAL	6,513	8,102	28,426	18,262	114,703	86,550	11,861	56,450	22,632	14,012	9,024	6,677
MEAN	210	270	917	589	4,097	2,792	395	1,821	754	452	291	223
MAX	535	637	2,780	2,550	14,200	6,290	804	6,620	3,580	1,450	1,060	570
MIN	88	129	187	174	133	840	220	205	180	155	165	125
CFSH	.13	.17	.56	.36	2.52	1.71	.24	1.12	.46	.28	.18	.14
IN.	.15	.19	.65	.42	2.62	1.98	.27	1.29	.52	.32	.21	.15
CAL YR 1970	TOTAL	544,888	MEAN	1,493	MAX	14,600	MIN	88	CFSH	.92	IN	12.44
WTR YR 1971	TOTAL	383,212	MEAN	1,050	MAX	14,200	MIN	88	CFSH	.64	IN	8.75

03228500 Big Walnut Creek at Central College, Ohio

LOCATION.--Lat 40°06'13", long 82°53'03", T.2N., R.17W., Franklin County, on left bank at upstream side of county road bridge, 0.2 mile east of Central College, 0.4 mile downstream from Hoover Dam, and 3 miles southeast of Westerville.

DRAINAGE AREA.--190 sq mi.

PERIOD OF RECORD.--July 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 815.16 ft above mean sea level.

AVERAGE DISCHARGE.--33 years, 176 cfs.

EXTREMES.--Current year: Maximum discharge, 3,250 cfs Mar. 13 (gage height, 10.30 ft); minimum daily discharge, 78 cfs Aug. 22.

Period of record: Maximum discharge, 23,800 cfs Jan. 21, 1959 (gage height, 19.75 ft), from rating curve extended above 7,200 cfs on basis of computation of peak flow over Hoover Dam; no flow for many days in 1944 and 1955.

REMARKS.--Records good. Flow completely regulated by Hoover Reservoir 0.1 mile upstream since September 1954 (see sta. 03228400). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 873: 1938. WSP 1435: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	100	108	87	110	103	94	113	110	84	80	108
2	108	212	104	95	115	110	99	99	94	94	104	104
3	103	173	105	85	114	96	100	91	100	88	95	99
4	91	120	105	199	116	103	91	96	113	85	90	94
5	114	105	92	163	183	97	97	93	113	84	103	92
6	112	125	106	112	118	150	100	131	111	107	97	99
7	122	113	110	115	103	150	102	114	108	104	91	101
8	106	99	103	108	102	103	100	125	106	111	90	101
9	109	116	106	98	108	106	99	91	103	107	109	110
10	104	116	105	106	106	105	97	93	107	79	111	107
11	92	115	96	109	106	99	99	107	121	92	98	93
12	106	116	95	110	110	106	105	91	100	93	101	93
13	108	111	85	105	100	1,070	97	84	91	90	105	97
14	110	110	167	101	100	682	94	93	97	92	105	100
15	104	105	92	98	108	662	96	98	93	86	94	106
16	107	113	106	101	99	1,310	94	100	98	100	117	95
17	108	113	95	97	110	858	86	99	102	88	121	102
18	95	110	105	109	103	130	90	99	113	84	127	91
19	114	118	99	102	100	325	115	96	110	92	123	92
20	108	110	90	107	152	530	111	100	102	90	101	99
21	123	105	112	96	103	454	98	97	99	100	98	127
22	120	103	108	102	193	554	106	102	95	104	78	101
23	118	116	100	106	203	337	104	93	102	115	120	97
24	116	113	131	104	112	162	101	106	124	91	101	100
25	102	111	94	108	106	176	102	108	125	79	106	99
26	121	97	91	115	100	118	106	98	179	93	99	87
27	119	113	95	100	99	96	106	90	84	93	98	98
28	126	96	103	106	103	91	93	96	105	93	91	114
29	106	99	102	108	-----	97	93	93	93	91	86	117
30	120	117	106	100	-----	97	101	91	99	96	99	96
31	114	-----	93	100	-----	96	-----	99	-----	88	101	-----
TOTAL	3,414	3,468	3,149	3,352	3,282	9,173	2,976	3,086	3,197	2,893	3,139	3,019
MEAN	110	116	102	108	117	296	99.2	99.5	107	93.3	101	101
MAX	126	212	131	199	203	1,310	115	131	179	115	127	127
MIN	91	96	85	85	99	91	86	84	84	79	78	87

CAL YR 1970 TOTAL 65,527 MEAN 180 MAX 3,230 MIN 75
WTR YR 1971 TOTAL 44,148 MEAN 121 MAX 1,310 MIN 78

Note: No gage-height record Oct. 1-20, Apr. 14 to June 4.

03228805 Alum Creek at Africa, Ohio

LOCATION.—Lat 40°10'56", long 82°57'42", in SE 1/4 sec. 1, T.3N., R.18W., Delaware County, on left bank at downstream side of bridge on Orange Township Road 109, 0.3 mile west of Africa, 0.4 mile downstream from Alum Creek dam site, 1.4 miles downstream from Williams Lake outlet, 2.7 miles upstream from Westerville Reservoir outlet, and 4.2 miles northwest of Westerville.

DRAINAGE AREA.—122 sq mi.

PERIOD OF RECORD.—August and September 1962 (discharge measurements only). June 1963 to current year.

GAGE.—Water-stage recorder. Datum of gage is 817.28 ft above mean sea level.

AVERAGE DISCHARGE.—8 years, 111 cfs (12.36 inches per year).

EXTREMES.—Current year: Maximum discharge, 3,000 cfs Feb. 23 (gage height, 10.71 ft); minimum, 0.35 cfs Aug. 23, 24.

Period of record: Maximum discharge, 6,160 cfs Mar. 10, 1964 (gage height, 13.95 ft, from graph based on gage readings); no flow at times 1963-65.

Flood of Mar. 5, 1963 reached a stage of 14.2 ft, from floodmarks (discharge, 6,460 cfs).

REMARKS.—Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WBP 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.5	12	17	4.0	200	37	15	14	13	1.6	2.2
2	2.9	19	16	16	3.7	158	53	15	14	6.8	1.1	1.3
3	2.8	42	12	15	3.6	125	61	19	24	4.4	5.9	.92
4	2.4	34	20	140	30	96	47	18	23	4.3	5.1	1.3
5	2.1	17	46	263	500	87	39	15	16	3.3	2.6	1.3
6	2.1	9.7	32	119	300	230	35	776	15	2.9	1.8	2.9
7	1.9	7.2	20	60	100	704	33	644	50	2.2	1.4	2.9
8	1.8	5.1	15	32	50	253	31	651	41	1.6	.92	2.2
9	1.9	4.9	13	28	26	137	29	398	22	1.4	1.3	1.3
10	2.0	4.7	9.8	25	23	129	25	176	15	2.9	.82	.92
11	2.3	4.6	9.0	23	26	143	23	104	12	4.8	.82	.92
12	2.5	4.3	83	22	36	247	21	99	10	3.8	.53	.82
13	3.5	4.3	258	21	98	686	22	124	18	3.8	.48	1.1
14	11	5.2	103	26	94	413	27	81	30	2.2	.44	1.3
15	16	18	61	28	68	358	29	58	29	2.2	.44	1.0
16	7.7	30	43	22	44	320	26	47	16	1.8	.44	1.0
17	4.8	25	51	18	78	190	24	42	11	1.3	.44	1.8
18	3.3	16	52	16	300	143	23	36	8.8	1.0	.40	2.0
19	2.8	10	44	14	460	150	21	29	7.1	.66	.40	1.6
20	2.7	9.8	36	13	660	204	19	24	6.5	.66	.53	7.4
21	2.9	10	30	12	500	162	18	22	6.2	.53	.48	9.1
22	4.1	9.6	167	12	1,000	132	21	18	5.1	.48	.48	10
23	6.8	8.7	416	12	1,970	112	22	16	4.3	.40	.44	6.8
24	9.2	6.0	188	12	434	89	18	15	3.8	20	.48	3.8
25	6.0	5.2	70	13	240	76	16	41	26	24	2.0	2.4
26	4.4	4.6	54	13	393	70	15	60	238	15	6.5	9.4
27	3.9	4.4	38	9.4	613	62	14	37	37	7.4	16	9.4
28	3.4	4.7	28	7.4	330	57	15	27	15	4.6	3.5	4.8
29	3.5	6.3	24	5.8	-----	54	19	22	21	3.5	4.8	3.1
30	3.7	8.7	20	5.0	-----	46	17	19	11	2.6	4.3	2.6
31	3.5	-----	18	4.4	-----	40	-----	16	-----	2.2	2.9	-----
TOTAL	130.6	342.5	1,988.8	1,044.0	8,384.3	5,873	800	3,664	749.8	146.13	69.34	97.58
MEAN	4.21	11.4	64.2	33.7	299	189	26.7	118	25.0	4.71	2.24	3.25
MAX	16	42	416	283	1,970	704	61	776	238	24	16	10
MIN	1.8	3.5	9.0	4.4	3.6	40	14	15	3.8	.40	.40	.82
CFSM	.03	.09	.53	.28	2.45	1.55	.22	.97	.20	.04	.02	.03
IN.	.04	.10	.61	.32	2.56	1.79	.24	1.12	.23	.04	.02	.03

CAL YR 1970 TOTAL 36,730.46 MEAN 101 MAX 3,200 MIN 1.3 CFSM .83 IN 11.20
WTR YR 1971 TOTAL 23,290.05 MEAN 63.8 MAX 1,970 MIN .40 CFSM .52 IN 7.10

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	0230	10.71	3,000	5-6	1930	8.22	1,500

03229000 Alum Creek at Columbus, Ohio

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec. 24, T.5N., R.22W., Franklin County, on left bank 0.2 mile downstream from Livingston Avenue Bridge in Columbus, and 6 miles upstream from mouth.

DRAINAGE AREA.--189 sq mi.

PERIOD OF RECORD.--July 1923 to December 1935, January 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 733.69 ft above mean sea level.

AVERAGE DISCHARGE.--45 years, 162 cfs (11.64 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,560 cfs Feb. 23 (gage height, 7.65 ft); minimum, 6.6 cfs Aug. 19.

Period of record: Maximum discharge, 26,400 cfs Jan. 22, 1959 (gage height, 19.59 ft, from high-water mark in well), from rating curve extended above 17,000 cfs on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

REMARKS.--Records good except those for the winter period, which are fair. There was no pumpage from the Alum Creek well field this year. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 758: 1933. WSP 1305: 1928(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	16	28	41	17	290	64	35	27	129	14	16
2	24	202	26	38	16	214	81	44	26	44	14	14
3	21	77	35	36	16	180	83	60	29	28	20	26
4	23	49	53	362	267	129	74	40	34	22	46	29
5	23	39	42	359	717	112	62	37	32	21	28	14
6	25	27	48	160	618	362	55	565	28	20	15	29
7	27	21	36	120	189	1,030	53	1,050	26	17	11	37
8	32	19	30	84	95	442	48	795	62	19	9.5	17
9	32	17	26	62	84	192	46	595	44	19	8.5	12
10	37	16	24	52	72	201	42	266	31	28	9.0	11
11	22	17	31	46	64	207	37	159	25	96	9.5	12
12	19	16	185	44	88	322	35	123	21	34	9.0	12
13	67	18	280	43	190	720	35	147	48	20	9.0	28
14	55	35	172	52	228	505	40	115	98	15	8.0	34
15	34	83	95	50	113	530	40	83	51	25	7.5	14
16	26	44	83	45	87	475	39	71	42	34	8.0	16
17	21	38	92	40	170	286	35	83	29	11	7.5	15
18	16	32	80	36	451	201	35	58	25	11	7.0	10
19	15	26	65	33	654	210	34	51	21	11	7.0	9.5
20	19	35	54	30	1,200	274	32	46	17	11	32	168
21	42	30	49	30	848	234	32	40	20	9.5	26	55
22	25	24	306	30	1,570	186	32	37	17	9.0	13	23
23	16	21	443	31	3,010	162	34	32	14	9.0	9.0	17
24	14	20	297	32	725	129	35	31	14	322	8.5	16
25	16	18	144	32	350	107	32	147	69	67	147	14
26	16	19	100	31	442	98	31	74	1,180	35	86	76
27	15	18	74	27	790	91	35	64	159	28	76	39
28	15	17	64	23	510	83	46	46	69	21	32	26
29	21	33	54	20	-----	81	35	37	156	32	16	17
30	25	42	49	19	-----	74	37	32	74	19	12	14
31	23	-----	45	18	-----	64	-----	29	-----	17	14	-----
TOTAL	788	1,069	3,160	2,026	13,581	8,211	1,319	4,992	2,488	1,183.5	719.0	811.5
MEAN	25.4	35.6	102	65.4	485	265	44.0	161	82.9	38.2	23.2	27.1
MAX	67	202	493	362	3,010	1,030	83	1,050	1,180	322	147	168
MIN	14	16	24	18	16	64	31	29	14	9.0	7.0	9.5
CFSM	.13	.19	.54	.35	2.57	1.40	.23	.85	.44	.20	.12	.14
IN.	.16	.21	.62	.40	2.67	1.62	.26	.98	.49	.23	.14	.16

CAL YR 1970 TOTAL 61,292.0 MEAN 168 MAX 3,720 MIN 14 CFSM .89 IN 12.06

WTR YR 1971 TOTAL 40,348.0 MEAN 111 MAX 3,010 MIN 7.0 CFSM .59 IN 7.94

PEAK DISCHARGE (BASE, 3,000 CFS).--Feb. 23 (0445) 3,560 cfs (7.65 ft).

03229500 Big Walnut Creek at Rees, Ohio

LOCATION.--Lat 39°51'24", long 82°57'26", in NE 1/4 sec. 26, T.4S., R.22W., Franklin County, on right bank at downstream side of bridge on House Road, 0.5 mile southwest of Rees, 4.2 miles downstream from Alum Creek, and 10.5 miles upstream from mouth.

DRAINAGE AREA.--544 sq mi.

PERIOD OF RECORD.--August 1921 to December 1935. October 1936 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 696.20 ft above mean sea level. Aug. 16, 1921, to Oct. 23, 1927, nonrecording gage at site 0.3 mile upstream at datum 7.00 ft higher prior to Oct. 1, 1924, at present datum thereafter.

AVERAGE DISCHARGE.--47 years, 492 cfs (12.26 inches per year) (adjusted for diversion).

EXTREMES.--Current year: Maximum discharge, 4,770 cfs Feb. 23 (gage height, 9.41 ft); minimum, 32 cfs June 25, Aug. 19, 20.

Period of record: Maximum discharge, 59,800 cfs Jan. 42, 1959 (gage height, 22.03 ft, from high-water mark in well), from rating curve extended above 13,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 5 cfs Sept. 4, 9, 10-12, 1929.

Flood of Mar. 29, 1913 reached a stage of 20.5 ft, present datum, at site 0.3 mile upstream.

REMARKS.--Records good. Flow regulated by Hoover Reservoir 26 miles upstream, since September 1954 (see sta. 03294600). Diversion upstream from station for part of municipal supply of city of Columbus beginning June 15, 1956. For statement on diversion from Alum Creek basin into municipal supply system of the city of Columbus see REMARKS for station 03229000. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1053: 1929, 1933(M), 1943(M), 1945. WSP 1305: 1923(M), 1925-26(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	70	211	110	60	618	183	85	77	314	78	56
2	54	979	157	100	60	511	266	83	72	425	63	52
3	54	1,120	132	100	62	441	269	151	72	147	81	50
4	60	429	238	1,290	366	355	224	114	73	87	257	74
5	68	317	224	1,210	1,980	320	190	94	62	69	193	53
6	78	215	175	504	1,130	559	171	700	74	64	100	47
7	90	156	133	280	437	2,410	183	1,410	65	56	74	123
8	96	130	109	230	251	970	159	1,730	80	50	63	78
9	110	106	95	190	151	500	145	1,020	90	52	55	52
10	130	92	89	160	140	484	137	519	74	56	53	44
11	90	86	91	148	160	527	125	341	63	227	58	45
12	70	86	1,070	130	218	692	121	302	53	185	50	63
13	240	84	1,020	120	853	1,480	129	287	49	96	46	49
14	180	107	590	218	519	2,250	131	269	281	64	43	141
15	130	560	380	212	348	1,540	119	227	131	53	39	80
16	90	382	331	150	257	1,840	115	171	97	338	38	53
17	68	231	519	120	422	1,970	111	251	76	90	37	59
18	54	174	415	110	1,100	727	105	198	63	54	36	47
19	52	144	320	100	1,390	535	99	147	53	46	33	43
20	70	151	257	96	2,250	960	94	123	46	44	65	195
21	160	202	224	96	1,550	871	96	105	58	41	106	290
22	90	152	965	96	2,780	745	94	93	58	36	60	103
23	62	116	1,100	96	4,250	688	92	85	42	36	48	86
24	54	94	831	98	1,530	437	89	80	38	1,200	38	61
25	50	84	472	98	745	390	86	394	40	970	37	54
26	48	79	281	90	799	376	82	242	1,920	275	566	133
27	48	80	230	74	1,450	281	81	185	547	153	500	185
28	52	82	180	68	965	245	123	129	218	103	163	96
29	60	109	150	66	-----	227	97	105	408	135	86	72
30	93	278	130	64	-----	203	87	93	215	100	64	54
31	80	-----	120	62	-----	185	-----	82	-----	82	56	-----
TOTAL	2,641	6,895	11,239	6,478	26,233	24,529	3,983	9,815	5,215	5,650	3,178	2,530
MEAN	85.2	230	363	209	937	791	133	317	174	182	103	84.3
MAX	240	1,120	1,100	1,290	4,250	2,410	269	1,730	1,920	1,200	566	290
MIN	48	70	89	62	60	185	81	80	38	36	33	43
(#)	97.1	94.2	93.6	96.5	97.7	98.2	101	97.2	114	103	104	98.3

CAL YR 1970 TOTAL 173,424 MEAN 475 MAX 9,430 MIN 35 (#) 97.2
WTR YR 1971 TOTAL 108,386 MEAN 297 MAX 4,250 MIN 33 (#) 99.6

(#) Diversion, equivalent in cubic feet per second, for city of Columbus.

03230500 Big Darby Creek at Darbyville, Ohio

LOCATION.--Lat 39°42'03", long 83°06'35", Pickaway County, near right bank on downstream side of pier of bridge on State Highway 316, 0.4 mile northeast of Darbyville, 0.4 mile upstream from Lizard Run, and 3 miles downstream from Greenbrier Creek.

DRAINAGE AREA.--534 sq mi.

PERIOD OF RECORD.--October 1921 to December 1930, January 1938 to current year. Prior to October 1959, published as Darby Creek at Darbyville.

GAGE.--Water-stage recorder. Datum of gage is 713.69 ft above mean sea level. Prior to Mar. 17, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years, 429 cfs (10.91 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,870 cfs Feb. 23 (gage height, 10.62 ft); minimum 22 cfs Oct. 9, 10. Period of record: Maximum discharge, 49,000 cfs Jan. 22, 1959 (gage height, 17.94 ft), from rating curve extended above 22,000 cfs on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 cfs Sept. 17, 1932.

REMARKS.--Records good except those for the winter period, which are fair.

REVISIONS (WATER YEARS).--WSP 1061: 1922(M), 1924(M), 1927(M), 1933(M), 1938(M). WSP 1305: 1928-31(M), 1934(M), 1945(M). WSP 1505: 1932(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	36	54	120	80	1,260	308	104	119	172	58	46
2	27	58	53	110	76	955	310	101	112	603	51	41
3	26	74	51	110	74	802	260	106	107	516	48	40
4	24	62	57	440	140	651	230	112	104	306	51	37
5	24	53	62	940	1,500	561	220	103	98	217	49	34
6	24	49	62	883	2,300	1,000	209	130	92	170	47	141
7	23	45	59	554	1,400	2,400	203	324	90	141	47	435
8	23	43	56	380	600	2,700	196	1,240	86	122	45	190
9	23	41	56	300	300	1,200	188	1,380	88	106	43	133
10	25	40	52	230	230	1,000	176	838	96	107	41	100
11	25	39	51	200	200	1,000	161	561	92	146	39	83
12	24	39	95	190	250	1,400	152	449	88	161	38	-
13	27	38	183	180	551	2,400	154	429	84	154	37	65
14	30	40	249	200	360	2,500	161	453	85	127	34	56
15	34	50	229	190	300	2,100	158	336	79	104	34	48
16	40	53	178	170	246	1,700	149	273	78	102	32	47
17	37	51	215	150	465	1,300	146	260	72	89	30	43
18	35	50	202	140	1,350	1,000	143	235	67	73	28	42
19	34	49	234	130	2,370	920	136	209	65	66	27	39
20	35	49	206	120	2,760	840	127	186	66	60	28	43
21	38	50	166	120	2,880	760	124	168	67	56	32	178
22	40	58	371	110	3,450	680	125	158	57	61	32	112
23	40	47	596	110	5,790	620	125	149	50	62	32	83
24	37	45	797	110	4,370	560	121	141	48	83	33	66
25	37	45	497	100	1,680	500	115	176	48	200	39	50
26	36	46	316	100	1,430	460	109	213	1,680	132	176	70
27	34	44	230	98	2,240	430	106	182	2,500	101	238	78
28	34	43	200	96	1,970	400	116	167	1,320	89	161	72
29	35	44	170	94	-----	370	112	149	719	83	103	68
30	36	49	150	90	-----	340	108	138	540	73	72	68
31	35	-----	130	85	-----	310	-----	128	-----	66	55	-----
TOTAL	970	1,421	6,027	6,850	39,362	33,119	4,940	9,680	8,797	4,748	1,780	2,585
MEAN	31.3	47.4	194	221	1,406	1,068	165	310	293	153	57.4	86.2
MAX	40	74	797	940	5,790	2,700	310	1,380	2,500	603	238	435
MIN	23	35	51	85	74	310	106	101	48	56	27	34
CFSM	.06	.09	.36	.41	2.63	2.00	.31	.58	.55	.29	.11	.16
IN.	.07	.10	.42	.48	2.74	2.31	.34	.67	.61	.33	.12	.18

CAL YR 1970 TOTAL 167,798 MEAN 460 MAX 7,950 MIN 23 CFSM .86 IN 11.69
WTR YR 1971 TOTAL 120,199 MEAN 329 MAX 5,790 MIN 23 CFSM .62 IN 8.37

03230800 Deer Creek at Mount Sterling, Ohio

LOCATION.--Lat 39°42'54", long 83°15'26", Madison County, on left bank at downstream side of bridge on State Highway 56, 0.2 mile downstream from unnamed right bank tributary, 0.6 mile southeast of Mount Sterling, and 4.9 miles upstream from Duffs Fork.

DRAINAGE AREA.--226 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 836.25 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 201 cfs (11.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,100 cfs Feb. 22 (gage height, 9.44 ft); minimum, 5.1 cfs Nov. 24.
Period of record: Maximum discharge, 15,200 cfs May 24, 1968 (gage height 11.87 ft); minimum, 5.1 cfs Nov. 24, 1970.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	32	54	29	527	129	45	47	274	38	31
2	11	28	27	50	28	442	134	43	47	590	34	28
3	10	36	25	46	27	379	118	50	46	347	34	41
4	9.9	33	30	338	170	294	108	46	43	221	41	46
5	8.2	103	42	419	1,570	280	98	43	41	166	46	33
6	7.9	98	34	205	621	437	98	74	39	138	41	35
7	9.1	90	28	145	288	1,220	97	166	38	116	33	251
8	10	80	25	130	166	690	89	780	37	97	30	158
9	9.6	70	24	110	100	433	81	527	35	86	27	91
10	11	62	23	90	90	391	75	318	33	79	25	65
11	11	56	22	80	84	391	70	238	31	93	25	53
12	11	48	48	74	100	570	67	191	31	98	24	47
13	14	43	121	70	230	1,130	68	158	34	74	23	41
14	26	41	86	109	160	798	74	129	106	63	22	35
15	23	46	64	114	120	891	65	108	136	58	20	33
16	25	42	58	74	100	810	62	98	89	65	19	32
17	19	36	92	64	280	527	60	100	58	58	17	27
18	17	33	98	58	800	412	58	91	46	47	16	25
19	15	31	83	54	1,000	395	55	81	75	45	16	24
20	16	32	67	50	1,340	374	52	75	102	43	16	41
21	22	36	56	52	743	311	53	70	72	41	22	140
22	31	33	203	58	3,160	294	57	63	58	37	24	86
23	26	28	323	60	2,920	270	52	60	43	34	21	62
24	22	15	242	53	975	242	50	57	37	67	20	49
25	20	26	168	50	680	218	47	88	33	180	19	42
26	18	21	111	44	756	209	45	93	250	93	155	58
27	16	22	98	40	1,110	186	45	74	1,400	67	129	70
28	15	22	82	38	714	177	58	65	700	52	95	58
29	16	21	70	35	-----	166	55	60	500	49	57	49
30	17	26	62	32	-----	148	46	57	387	50	41	42
31	18	-----	58	30	-----	134	-----	52	-----	43	34	-----
TOTAL	496.7	1,276	2,502	2,826	18,361	13,746	2,166	4,092	4,594	3,471	1,164	1,793
MEAN	16.0	42.5	80.7	91.2	656	443	72.2	132	153	112	37.5	59.8
MAX	31	103	323	419	3,160	1,220	134	780	1,400	590	155	251
MIN	7.9	15	22	30	27	134	45	43	31	34	16	24
CFSM	.07	.19	.35	.40	2.88	1.94	.32	.58	.67	.49	.16	.26
IN.	.08	.21	.41	.46	3.00	2.24	.35	.67	.75	.57	.19	.29
CAL YR 1970	TOTAL 66,248.2	MEAN 182	MAX 3,910	MIN 7.9	CFSM .80	IN 10.81						
WTR YR 1971	TOTAL 56,487.7	MEAN 155	MAX 3,160	MIN 7.9	CFSM .68	IN 9.22						

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	1800	7.90	2,320	6-26 or 27	Unknown	9.25	4,760
2-22	2000	9.44	5,100				

03230900 Deer Creek near Pancoastburg, Ohio

LOCATION.--lat 39°37'14", long 83°12'47", Pickaway County, on left bank 200 ft downstream from bridge on Crownover Mill Road, 1,200 ft downstream from Deer Creek Dam, and 2.8 miles east of Pancoastburg.

DRAINAGE AREA.--277 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements and annual maximums, water years 1964-66, July 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above mean sea level (Corps of Engineers bench mark). Oct. 23, 1963, to June 30, 1966, crest-stage at site 200 ft upstream at datum 59.84 ft higher.

AVERAGE DISCHARGE.--5 years, 235 cfs.

EXTREMES.--Current year: Maximum discharge, 2,400 cfs Feb. 26 (gage height, 74.15 ft); minimum daily 7.0 cfs Aug. 21.

Period of record: Maximum discharge, 19,500 cfs (estimated) Mar. 10, 1964 (gage height, 80.93 ft, present datum). No flow May 25-27, 1966, result of dam closure.

REMARKS.--Records good. Flow regulated by Deer Creek Reservoir (see sta. 03230980). Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	69	96	68	2,280	45	8.5	33	960	32	70
2	18	129	24	96	56	2,260	9.6	9.0	41	950	32	42
3	18	220	28	96	50	2,300	9.0	9.6	42	605	30	36
4	18	294	41	232	105	1,310	9.6	9.5	42	369	76	30
5	18	281	46	484	545	478	9.6	9.6	42	334	78	30
6	18	324	47	343	1,080	590	9.6	11	42	313	60	31
7	18	388	50	234	820	1,490	8.5	11	42	150	40	125
8	18	418	47	152	514	1,170	7.8	11	41	104	32	188
9	18	414	47	152	178	575	7.8	11	41	64	23	195
10	18	410	47	152	122	496	7.8	11	38	45	20	104
11	16	406	47	152	140	492	7.8	11	36	79	20	69
12	16	403	47	152	162	373	8.1	11	36	97	20	67
13	16	350	154	152	302	800	8.1	12	30	95	17	42
14	16	327	165	149	294	980	8.1	12	28	84	16	36
15	16	324	129	149	223	975	8.5	12	30	65	15	35
16	16	321	59	149	173	975	8.5	11	48	52	11	36
17	16	318	57	149	149	685	8.5	11	65	48	10	36
18	16	264	109	149	261	501	8.5	11	70	48	10	30
19	16	239	127	111	653	501	8.5	11	69	47	10	28
20	16	236	127	53	1,360	445	8.5	11	83	45	7.4	256
21	16	239	127	44	1,650	304	8.5	11	95	42	7.0	441
22	16	239	173	48	52	274	8.5	11	97	42	7.4	565
23	16	264	337	48	13	274	9.0	11	95	31	7.4	550
24	16	275	290	57	17	277	9.0	11	92	26	7.4	492
25	16	272	261	62	896	277	9.0	11	90	115	7.8	441
26	16	270	218	60	2,180	248	9.0	10	796	111	7.8	394
27	17	250	152	65	2,030	215	9.0	10	1,810	99	64	372
28	17	178	152	65	2,270	215	9.5	10	1,790	54	92	369
29	17	157	109	65	-----	140	8.5	10	1,760	32	93	319
30	17	160	96	60	-----	140	8.5	18	1,400	32	93	301
31	17	-----	96	68	-----	140	-----	27	-----	32	92	-----
TOTAL	530	8,376	3,478	4,044	16,353	22,200	294.9	354.3	8,924	5,170	1,046.2	5,730
MEAN	17.1	279	112	130	584	716	9.83	11.4	297	167	33.7	191
MAX	36	418	337	484	2,270	2,300	45	27	1,810	960	93	565
MIN	15	16	24	44	13	140	7.8	8.5	28	26	7.0	28

CAL YR 1970 TOTAL 76,702.0 MEAN 210 MAX 1,970 MIN 14
WTR YR 1971 TOTAL 76,500.4 MEAN 210 MAX 2,300 MIN 7.0

LOCATION.—Lat 39°35'09", long 83°07'22", Pickaway County, on left bank at downstream side of bridge on U.S. Highway 22 at west edge of Williamsport, 2 miles downstream from Dry Run, and 7.6 miles upstream from Hay Run.

PERIOD OF RECORD.—August 1926 to December 1935, January 1938 to September 1956. Annual maximum, 1959, 1961-1962 water years, July 1962 to current year.

AVERAGE DISCHARGE.—36 years (1926-35, 1938-56, 1962-71), 281 cfs.

REMARKS.--Records fair prior to May 19, good thereafter. Flow regulated by Deer Creek Reservoir 9 miles upstream beginning in 1968. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1083: 1929. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET													JOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
1	25	16	147	121	86	2,100	34	19	44	985	42	105						
2	23	170	35	118	78	2,100	34	22	50	961	42	54						
3	22	350	33	116	76	2,100	32	24	56	767	68	52						
4	20	398	41	457	140	2,100	33	22	55	528	120	42						
5	19	383	51	682	800	1,100	33	24	55	450	120	40						
6	17	406	50	502	924	1,400	32	103	56	429	100	48						
7	36	475	50	363	836	1,600	32	138	55	264	65	176						
8	19	502	47	210	646	804	33	484	54	145	48	246						
9	14	490	45	198	436	592	32	216	52	115	42	265						
10	15	487	42	192	218	565	33	128	51	69	28	198						
11	16	478	43	186	204	577	35	99	45	91	27	89						
12	16	475	121	182	216	721	33	79	45	126	26	85						
13	16	430	186	188	403	968	31	65	45	123	26	71						
14	18	388	214	265	388	960	31	44	42	116	22	46						
15	19	393	161	242	280	948	28	34	42	82	26	45						
16	17	380	113	212	230	844	25	30	50	72	20	44						
17	16	375	119	210	433	565	24	29	70	60	15	45						
18	16	338	140	200	457	565	24	32	83	60	14	43						
19	16	300	162	162	706	568	23	35	100	61	14	36						
20	16	303	146	108	1,270	415	22	27	107	59	14	201						
21	19	295	146	64	1,420	343	21	24	131	54	11	610						
22	21	300	380	72	2,410	338	20	22	133	52	12	707						
23	21	305	529	72	454	335	20	22	122	49	12	715						
24	19	315	424	72	260	333	19	22	114	51	9.7	681						
25	18	313	348	83	619	330	18	56	112	99	12	618						
26	17	308	313	86	1,910	278	18	43	1,820	171	16	574						
27	16	298	214	88	1,840	234	19	31	1,640	122	32	531						
28	16	236	200	88	1,940	220	21	26	1,610	99	105	526						
29	16	204	170	88	-----	205	22	25	1,570	45	111	471						
30	18	210	142	84	-----	160	18	26	1,380	44	113	422						
31	16	-----	123	90	-----	46	-----	37	-----	42	110	-----						
TOTAL	573	10,321	4,935	5,801	19,680	24,414	800	1,988	9,789	6,391	1,416.7	7,786						
MEAN	18.5	344	159	187	703	788	26.7	64.1	326	206	45.7	260						
MAX	36	502	529	682	2,410	2,100	35	484	1,820	985	120	715						
MIN	14	16	33	64	76	46	18	19	42	42	9.7	36						
CAL YR 1970	TOTAL	96,189.0	MEAN	264	MAX	1,770	MIN	14										
WTR YR 1971	TOTAL	93,894.7	MEAN	257	MAX	2,410	MIN	9.7										

SCIOTO RIVER BASIN

113

03231500 Scioto River at Chillicothe, Ohio

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, on right bank at north end of Chillicothe, 1,400 ft downstream from Bridge Street Bridge on U.S. Highway 23, 7.4 miles upstream from Paint Creek, and 15.4 miles downstream from Deer Creek.

DRAINAGE AREA.--3,849 sq mi.

PERIOD OF RECORD.--December 1913 to September 1914 (gage heights and discharge measurements only), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in this vicinity since 1907 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft above mean sea level. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft upstream at different datum. Apr. 1, 1921, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft upstream at present datum. Aug. 7, 1930, 1969 water stage recorder 900 ft upstream at same datum.

AVERAGE DISCHARGE.--51 years, 3,269 cfs.

EXTREMES.--Current year: Maximum discharge, 26,700 cfs Feb. 25 (gage height, 13.39 ft); minimum, 430 cfs Aug. 20, 21, 24. Period of record: Maximum discharge, 144,000 cfs Jan. 23, 1959 (gage height, 32.50 ft, from high-water mark in well); minimum, 160 cfs Jan. 1, 1931; minimum gage height, 0.81 ft Sept. 27, 1944. Flood of Mar. 26, 1911 reached a stage of 39.8 ft (discharge, 260,000 cfs, estimated by Franklin County Conservancy District).

REMARKS.--Records good. Flow regulated by 5 reservoirs 36 to 91 miles upstream from station (see P. 120, 121). Water-quality records for the current year are published in Part 2 of this report.

RESERVOIRS (WATER YEARS).--WSP 603: 1929(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	706	602	1,350	1,550	780	13,900	2,280	945	1,200	3,370	860	664
2	626	888	1,160	1,460	760	10,600	2,150	916	1,120	3,220	762	626
3	566	4,290	990	1,380	760	8,420	2,070	960	1,080	3,170	748	614
4	530	3,840	1,110	2,330	1,100	7,300	1,880	1,140	1,040	2,180	888	638
5	480	2,190	1,460	7,590	7,000	5,080	1,760	1,040	1,070	1,670	1,230	638
6	440	1,730	1,370	6,760	10,700	4,450	1,670	1,200	1,420	1,460	1,140	566
7	450	1,550	1,230	5,040	9,570	10,500	1,590	3,210	1,540	1,280	860	975
8	470	1,470	1,160	3,490	6,820	13,900	1,530	8,930	1,420	1,050	720	1,720
9	460	1,370	1,070	2,660	4,300	9,840	1,430	11,600	1,350	945	626	1,170
10	692	1,290	975	2,330	2,800	7,060	1,400	9,750	1,490	1,340	602	930
11	776	1,260	916	2,070	2,100	6,180	1,340	8,730	1,410	1,170	602	776
12	602	1,220	1,460	1,940	2,100	6,480	1,250	8,160	1,200	1,410	576	54
13	590	1,200	4,500	1,790	4,290	8,310	1,220	5,610	978	1,350	566	638
14	874	1,130	4,380	2,100	4,740	11,000	1,230	4,920	1,030	1,340	530	626
15	1,050	1,670	4,500	2,570	3,020	12,300	1,290	4,480	1,390	2,060	602	678
16	1,220	2,790	3,710	2,130	2,660	12,900	1,190	3,670	1,620	2,260	638	638
17	1,020	2,040	3,400	1,880	2,700	12,800	1,140	2,890	1,800	1,980	602	554
18	1,010	1,770	3,380	1,730	6,580	10,700	1,140	2,550	1,440	1,300	510	542
19	860	1,710	2,900	1,590	8,860	7,630	1,160	2,140	1,120	1,040	470	510
20	626	1,590	2,630	1,430	12,100	6,600	1,130	2,000	964	860	460	490
21	614	1,700	2,330	1,310	15,000	6,460	1,110	1,860	894	790	500	1,280
22	790	1,610	4,010	1,250	20,100	6,200	1,100	1,710	885	734	692	1,720
23	734	1,430	7,060	1,160	22,700	5,800	1,080	1,540	826	678	530	1,440
24	664	1,350	6,940	1,140	24,500	5,550	1,040	1,380	737	706	460	1,300
25	614	1,280	6,360	1,110	25,600	4,610	1,010	1,400	688	3,000	470	1,160
26	554	1,200	4,750	1,070	20,100	3,940	975	2,260	7,480	2,570	1,120	1,110
27	520	1,110	3,380	960	16,700	3,400	945	1,730	10,700	1,410	2,140	1,220
28	530	1,020	2,420	900	15,800	3,050	975	1,930	7,420	1,080	2,310	1,350
29	520	916	2,030	880	-----	2,860	1,110	1,960	5,290	930	1,170	1,110
30	542	990	1,850	840	-----	2,650	1,040	1,610	4,800	1,020	846	930
31	602	-----	1,710	800	-----	2,460	-----	1,360	-----	916	720	-----
TOTAL	20,732	48,206	86,491	65,240	254,240	232,930	40,235	103,581	65,402	48,289	24,952	27,277
MEAN	669	1,607	2,790	2,105	9,080	7,514	1,341	3,341	2,180	1,558	805	905
MAX	1,220	4,290	7,060	7,590	25,600	13,900	2,280	11,600	10,700	3,370	2,310	1,720
MIN	440	602	916	800	760	2,460	945	916	688	678	460	490
CAL YR 1970	TOTAL	1,353,983	MEAN	3,710	MAX	30,700	MIN	440				
WTR YR 1971	TOTAL	1,017,575	MEAN	2,788	MAX	25,600	MIN	440				

SCIOTO RIVER BASIN

03232000 Paint Creek near Greenfield, Ohio

LOCATION.—Lat 39°22'45", long 83°22'32", Fayette County, on right bank at upstream side of bridge on State Highway 753, 0.6 mile upstream from Stone Run, 2 miles north of Greenfield, and 3.0 miles downstream from Indian Creek.

DRAINAGE AREA.—249 sq mi.

PERIOD OF RECORD.—Aug. 11, 1926 to Nov. 10, 1935, October 1939 to September 1956, water years 1962-66 (occasional low-flow measurements), water years 1963-66 (annual maxima), October 1966 to current year.

GAGE.—Water-stage recorder. Datum of gage is 844.27 ft above mean sea level. Prior to Feb. 14, 1940 nonrecording gage, Feb. 14, 1940 to June 3, 1955 water-stage recorder, June 4, 1955 to Sept. 30, 1956 nonrecording gage, at same site with datum 1.00 ft higher.

AVERAGE DISCHARGE.—31 years (1926-35, 1939-56, 1966-71), 218 cfs (11.89 inches per year).

EXTREMES.—Current year: Maximum discharge, 5,530 cfs Feb. 22 (gage height, 9.95 ft); minimum, 7.2 cfs Aug. 21, 22. Period of record: Maximum discharge, 21,700 cfs May 24, 1968 (gage height, 14.28 ft); no flow Sept. 10, 18, 27, 29, 30, Oct. 1, 4, 1953.

REMARKS.—Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WEP 743: 1926(M). WSP 758: 1926-33. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	13	18	78	39	631	115	38	59	200	23	14
2	19	83	16	68	38	506	117	37	54	140	18	13
3	16	110	14	60	38	432	105	57	52	110	17	25
4	14	61	15	350	300	338	92	54	47	88	80	52
5	13	42	16	619	811	309	87	53	41	74	76	23
6	11	31	12	360	755	555	84	307	37	62	41	20
7	10	24	11	220	440	1,190	86	695	37	54	30	167
8	9.3	20	9.8	180	200	948	80	1,280	38	46	23	248
9	8.8	19	9.5	160	110	591	76	1,170	33	40	19	56
10	9.1	17	9.8	140	90	506	71	747	30	160	17	32
11	12	15	11	120	94	544	64	513	29	140	19	30
12	12	14	81	110	140	699	62	397	26	110	17	41
13	11	14	104	100	400	912	64	326	26	78	14	28
14	15	16	77	265	350	890	68	258	27	66	12	23
15	16	29	71	303	200	851	62	206	49	52	11	23
16	14	24	74	214	140	926	58	176	133	64	11	20
17	11	19	148	170	500	663	58	183	76	52	11	17
18	9.8	19	120	120	1,110	473	56	158	52	46	9.6	15
19	11	19	109	94	1,080	452	53	139	40	41	8.0	15
20	9.9	23	91	84	1,100	436	47	127	76	36	8.0	19
21	17	31	94	78	972	370	46	113	66	30	7.6	35
22	24	23	518	76	4,010	332	49	100	54	26	7.6	22
23	17	21	504	74	4,850	290	46	91	44	24	8.8	37
24	15	22	421	72	2,110	246	44	86	36	36	9.2	29
25	15	19	310	70	898	216	40	165	32	42	10	24
26	14	18	216	66	835	199	38	150	800	41	89	63
27	13	17	190	54	962	181	37	115	1,900	61	68	47
28	12	16	150	48	851	169	36	92	1,500	47	26	33
29	13	15	120	44	-----	158	38	82	700	36	21	26
30	14	18	100	42	-----	139	40	71	400	29	16	25
31	15	-----	90	40	-----	123	-----	64	-----	26	16	-----
TOTAL	422.9	812	3,730.1	4,479	23,423	15,275	1,919	8,050	6,494	2,057	743.8	1,222
MEAN	13.6	27.1	120	144	837	493	64.0	260	216	66.4	24.0	40.7
MAX	24	110	518	619	4,850	1,190	117	1,280	1,900	200	89	248
MIN	8.8	13	9.5	40	38	123	36	37	26	24	7.6	13
CFSM	.05	.11	.48	.58	3.36	1.98	.26	1.04	.87	.27	.10	.16
IN.	.06	.12	.56	.67	3.50	2.28	.29	1.20	.97	.31	.11	.18

CAL YR 1970 TOTAL 68,715.8 MEAN 188 MAX 3,960 MIN 3.2 CFSM .76 IN 10.27
 WTR YR 1971 TOTAL 68,627.8 MEAN 188 MAX 4,850 MIN 7.6 CFSM .76 IN 10.25

PEAK DISCHARGE (BASE, 2,000 CFS).—Feb. 22 (0800) 5,530 cfs (9.95 ft).

03232470 Paint Creek below Paint Creek Dam, near Bainbridge, Ohio

LOCATION.--Lat 39°15'00", long 83°20'28", Highland County, on right bank, 400 ft below Paint Creek site, 700 ft upstream from Cliff Creek, and 4.5 miles northwest of Bainbridge.

DRAINAGE AREA.--570 sq mi.

PERIOD OF RECORD.--Annual maximum, water years 1963-67 and occasional low-flow measurements, water years 1962-67. October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft above mean sea level. (Levels by Corps of Engineers). Prior to May 3, 1968, water-stage recorder and crest-stage gage at partial-record site 1,000 ft downstream, at datum 42.96 ft higher.

EXTREMES.--Current year: Maximum discharge, 7,910 cfs Feb. 23 (gage height, 54.15 ft); minimum daily 35 cfs Aug. 24.
Period of record: Maximum discharge, about 45,000 cfs Mar. 10, 1964 (gage height, 27.3 ft, site and datum then in use); minimum observed 1.1 cfs Sept. 17, 1964.

REMARKS.--Records good prior to June 7, fair thereafter. Peak flow affected by temporary storage behind Paint Creek Dam (under construction), subsequent to January 1971. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	45	68	170	76	1,340	296	121	157	379	62	45
2	67	160	67	150	74	1,050	313	119	147	288	55	46
3	60	334	63	140	74	916	285	133	139	239	62	84
4	92	182	64	1,000	700	766	255	139	131	200	192	150
5	48	130	63	1,580	2,660	670	234	127	121	178	182	95
6	45	102	59	1,060	1,700	363	225	279	113	145	106	88
7	41	85	54	600	1,000	3,020	225	1,140	390	130	83	148
8	39	79	51	420	430	2,520	218	2,280	132	114	70	250
9	37	68	50	360	200	1,580	208	2,490	108	102	62	117
10	37	64	50	320	220	1,120	200	1,650	99	302	55	90
11	42	63	52	280	270	1,290	188	1,020	93	320	52	88
12	46	59	131	250	340	1,820	180	772	88	257	50	973
13	48	57	316	230	1,430	2,130	185	660	86	188	46	235
14	55	61	190	843	800	2,020	195	546	86	150	43	158
15	59	96	165	934	540	1,460	188	446	88	114	42	119
16	52	100	165	640	400	1,930	178	380	135	125	41	104
17	48	82	448	420	1,400	1,610	171	380	128	97	40	95
18	42	76	375	280	3,120	1,060	171	341	106	88	39	83
19	41	73	312	220	2,860	964	164	299	93	86	38	80
20	42	88	248	200	2,640	988	153	255	117	78	36	80
21	46	122	232	180	2,440	834	147	225	176	70	36	97
22	68	102	1,720	170	5,100	736	162	205	150	64	38	95
23	68	87	1,690	170	7,700	555	155	185	108	60	37	117
24	59	76	1,200	160	7,240	565	147	178	90	70	35	108
25	52	67	820	160	5,500	510	139	342	78	91	39	82
26	50	67	550	140	3,080	470	129	352	2,490	73	100	162
27	48	68	400	70	2,110	434	125	273	3,190	97	193	180
28	42	66	310	78	1,830	402	139	220	3,360	90	86	135
29	42	63	250	86	-----	386	123	195	1,410	80	62	108
30	47	66	210	82	-----	352	125	182	568	70	52	90
31	46	-----	190	78	-----	316	-----	168	-----	67	48	-----
TOTAL	1,546	2,788	10,563	11,471	55,974	35,321	5,523	16,101	14,186	4,412	2,082	4,302
MEAN	49.9	92.9	341	370	1,999	1,139	187	519	473	142	67.2	143
MAX	77	334	1,720	1,580	7,700	3,020	313	2,490	3,360	379	193	973
MIN	37	45	50	70	74	316	123	119	78	60	35	45
CFSM	.09	.16	.60	.65	3.91	2.00	.33	.91	.83	.25	.12	.25
IV.	.10	.18	.69	.75	3.65	2.31	.37	1.05	.93	.29	.14	.28
CAL YR 1970	TOTAL 164,305	MEAN 450	MAX 15,500	MIN 12	CFSM .79	IN 10.72						
WTR YR 1971	TOTAL 164,369	MEAN 450	MAX 7,700	MIN 35	CFSM .79	IN 10.73						

SCIOTO RIVER BASIN

03232500 Rocky Fork near Barretts Mills, Ohio

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, on left bank at downstream side of highway bridge, 1.1 miles north of Barretts Mills, 2 miles east of Rainsboro, 2.8 miles upstream from mouth, and 6 miles downstream from Rocky Fork Lake.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft above mean sea level, (levels by Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 146 cfs.

EXTREMES.--Current year: Maximum discharge, 4,270 cfs Feb. 22 (gage height, 10.05 ft); minimum daily, 10 cfs Aug. 20, 21.
Period of record: Maximum discharge, 13,400 cfs Mar. 10, 1964 from rating curve extended above 8,800 cfs on basis of velocity-area studies; maximum gage height, 15.56 ft Mar. 6, 1945; minimum discharge, 0.40 cfs Oct. 7, 11, 1964; minimum daily, 0.90 cfs Sept. 10, 1966.

REMARKS.--Records fair. Some diurnal fluctuation caused by mill 6 miles upstream from station. Flow regulated by Rocky Fork Lake 6 miles upstream, since 1952 (capacity, 34,100 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	16	278	298	15	579	19	26	38	188	25	53
2	52	278	276	296	14	574	25	31	37	131	20	62
3	42	190	275	296	12	571	19	36	34	88	64	215
4	25	149	277	484	200	566	17	30	30	64	414	339
5	18	125	274	352	391	564	16	27	29	50	454	288
6	15	97	273	313	320	739	15	61	27	40	330	240
7	12	79	270	301	308	740	15	100	450	33	243	312
8	11	79	270	298	302	598	14	215	243	26	176	263
9	11	54	198	298	299	576	13	174	162	24	121	205
10	12	50	15	295	316	612	13	133	121	46	87	153
11	16	43	13	166	291	688	13	106	95	71	66	125
12	17	40	37	24	343	641	14	96	79	67	45	848
13	20	39	29	77	393	603	20	105	74	53	34	916
14	90	48	21	508	321	581	26	97	69	40	26	538
15	91	165	18	431	298	375	26	83	57	30	22	357
16	63	193	43	407	295	63	29	76	44	25	20	255
17	46	195	156	401	429	47	32	103	35	22	17	205
18	72	210	116	392	349	42	32	102	30	67	13	155
19	26	228	109	302	341	55	31	89	26	82	12	129
20	27	280	164	127	367	49	32	77	25	58	10	115
21	32	275	210	120	326	41	33	66	39	39	10	95
22	34	267	543	122	1,930	38	35	55	71	29	20	77
23	33	262	705	122	1,160	34	32	46	59	25	22	67
24	30	258	366	121	751	31	34	44	45	37	16	55
25	135	269	334	106	562	28	29	106	37	53	13	46
26	14	283	318	25	477	28	27	85	1,290	49	73	174
27	11	281	313	14	462	26	25	71	985	57	306	233
28	11	280	307	15	479	24	33	59	545	35	240	188
29	12	279	304	15	-----	23	30	52	351	37	167	151
30	18	280	301	19	-----	20	26	47	250	32	111	121
31	17	-----	300	17	-----	19	-----	42	-----	31	74	-----
TOTAL	1,081	5,292	7,053	6,762	11,751	9,575	725	2,440	5,377	1,629	3,251	6,980
MEAN	34.9	176	228	218	420	309	24.2	78.7	179	52.5	105	233
MAX	135	283	705	508	1,930	740	35	215	1,290	188	454	916
MIN	11	16	13	14	12	19	13	26	25	22	10	46
CAL YR 1970	TOTAL 56,169.1			MEAN 154	MAX 5,460	MIN 3.4						
WTR YR 1971	TOTAL 61,916.0			MEAN 170	MAX 1,930	MIN 10						

03234000 Paint Creek near Bourneville, Ohio

LOCATION.--Lat 39°15'45", long 83°10'01", Ross County, on upstream side of left abutment of highway bridge, 0.2 mile downstream from Sulphur Lick, 1.2 miles southwest of Bourneville, and 1.2 miles upstream from Upper Twin Creek.

DRAINAGE AREA.--807 sq mi.

PERIOD OF RECORD.--October 1921 to January 1937, January 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Bainbridge" October 1921 to September 1923 and as "near Bainbridge" January 1938 to May 1939.

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft above mean sea level. See WSP 1725 for history of changes prior to May 3, 1939.

AVERAGE DISCHARGE.--48 years (1921-36, 1938-71), 775 cfs (13.04 inches per year).

EXTREMES.--Current year: Maximum discharge, 13,700 cfs Feb. 22 (gage height, 12.31 ft); minimum, 46 cfs Oct. 10.
Period of record: Maximum discharge, 56,900 cfs Mar. 10, 1964 (gage height, 20.50 ft), from rating curve extended above 26,000 cfs on basis of contracted-opening measurement at gage height 20.08 ft; minimum, 4.8 cfs Sept. 16, 17, 1964.

REMARKS.--Records good. Flow slightly regulated by Rocky Fork Lake 23 miles upstream since 1952 (capacity, 34,100 acre-ft), and by temporary storage behind Paint Creek Dam (under construction), subsequent to January 1971. Water-quality record for the current year is published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	62	351	526	164	1,950	357	183	222	810	127	128
2	123	280	346	510	142	1,630	372	183	211	600	117	118
3	103	551	340	495	131	1,470	357	200	197	466	122	158
4	68	387	339	1,320	677	1,310	327	202	189	386	443	362
5	73	304	335	2,000	3,600	1,190	307	193	179	321	677	322
6	63	245	329	1,420	2,190	1,410	290	264	169	277	424	257
7	58	202	320	927	1,420	4,230	284	1,000	1,910	244	305	356
8	52	171	316	871	907	3,320	277	2,590	675	219	241	465
9	48	159	312	820	590	2,350	266	2,650	363	202	202	326
10	49	132	163	710	650	1,790	256	1,970	282	247	175	244
11	49	124	94	616	785	2,070	244	1,190	239	435	155	212
12	53	115	122	401	692	2,580	235	906	213	500	139	1,220
13	55	108	351	341	1,920	2,890	235	800	200	375	123	1,250
14	70	112	291	1,250	1,240	2,700	247	695	193	293	112	646
15	142	209	236	1,370	979	2,460	244	572	183	235	103	442
16	114	304	225	1,050	763	2,100	239	488	187	191	97	333
17	93	302	497	867	1,350	1,780	235	500	208	189	92	279
18	84	280	548	748	3,460	1,230	235	480	179	167	85	234
19	85	301	455	710	3,100	1,050	228	424	163	167	80	205
20	64	352	404	516	2,990	1,120	222	369	151	169	76	190
21	64	430	384	425	2,740	960	215	330	195	157	73	183
22	69	400	2,280	429	9,490	830	224	293	295	143	73	183
23	98	369	2,800	416	9,870	750	222	266	213	126	81	169
24	91	338	1,840	378	8,840	650	213	251	179	130	79	176
25	116	330	1,190	363	6,400	584	204	389	161	148	76	160
26	119	350	923	298	4,070	540	195	459	321	164	100	188
27	69	354	765	190	2,690	500	189	375	705	169	395	330
28	61	350	674	182	2,360	470	195	312	1,120	174	297	282
29	57	344	619	182	-----	449	195	277	1,580	161	212	238
30	59	346	580	197	-----	417	185	254	1,330	148	173	207
31	63	-----	565	191	-----	379	-----	237	-----	140	147	-----
TOTAL	2,485	8,311	18,994	20,719	74,210	47,159	7,494	19,302	12,412	8,153	5,601	9,863
MEAN	80.2	277	613	668	2,650	1,521	250	623	414	263	181	329
MAX	153	551	2,800	2,000	9,870	4,230	372	2,650	1,910	810	677	1,250
MIN	46	62	94	182	131	379	185	183	151	126	73	118
CFSM	.10	.34	.76	.83	3.28	1.88	.31	.77	.51	.33	.22	.41
IN.	.11	.38	.88	.96	3.42	2.17	.35	.89	.57	.38	.26	.45

CAL YR 1970 TOTAL 239,626 MEAN 657 MAX 15,700 MIN 27 CFSM .81 IN 11.05
WTR YR 1971 TOTAL 234,703 MEAN 643 MAX 9,870 MIN 48 CFSM .80 IN 10.82

PEAK DISCHARGE (BASE, 9,000 CFS).--Feb. 22 (1200) 13,700 cfs (12.31 ft).

SCIOTO RIVER BASIN

03234500 Scioto River at Higby, Ohio

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7N., R.20W., Ross County, on left bank at downstream side of highway bridge, 0.6 mile downstream from Walnut Creek, 1.2 miles north of Higby, 3 miles west northwest of Richmondale, and 5.0 miles upstream from Salt Creek.

DRAINAGE AREA.--5,131 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 567.28 ft above mean sea level. Prior to Nov. 7, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 4,329 cfs.

EXTREMES.--Current year: Maximum discharge, 42,800 cfs Feb. 23 (gage height, 18.29 ft); minimum, 648 cfs Aug. 21, 25.
Period of record: Maximum discharge, 177,000 cfs Jan. 23, 1937, from rating curve extended above 112,000 cfs; maximum gage height, 26.4 ft Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum discharge, 244 cfs Oct. 23, 1930.
Flood of Mar. 26, 1913 reached a stage of 31.6 ft.

REMARKS.--Records good. Flow slightly regulated by 5 reservoirs 50 to 105 miles upstream from station (see p. 120 and since 1952 by Rocky Fork Lake 51 miles upstream (capacity 34,100 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 893: 1937(M) WSP 1908: Drainage area. Revised figures of discharge, in cubic feet per second, for the period Jan. 2-4, 6-8, 1966 superseding figures published in WRD Ohio 1966 are given below:

Jan. 2.....	15,200	Jan. 6.....	15,900	
3.....	26,000	7.....	22,700	
4.....	20,800	8.....	19,500	
Month	Cfs-days	Maximum	Minimum	Mean
January 1966.....	203,760	26,000	1,150	6,573
WTR YR 1966.....	1,308,090	38,500	453	3,584
CAL YR 1966.....	1,569,164	38,500	453	4,299

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,250	868	1,830	2,470	1,000	17,800	2,990	1,290	1,630	5,180	1,150	1,020
2	1,070	1,050	1,790	2,310	1,000	14,300	2,930	1,270	1,510	4,230	1,070	959
3	978	4,730	1,570	2,210	1,000	11,900	2,670	1,310	1,430	4,190	1,170	940
4	886	5,230	1,610	4,150	1,530	10,500	2,490	1,490	1,370	3,070	2,330	1,090
5	832	3,050	1,930	11,000	12,400	8,060	2,330	1,430	1,370	2,390	2,630	1,290
6	760	2,350	1,970	9,930	14,800	7,190	2,230	1,950	1,590	2,050	2,130	1,110
7	696	2,050	1,790	7,270	12,800	16,700	2,150	4,710	2,650	1,830	1,590	1,490
8	680	1,890	1,690	4,800	9,570	18,700	2,030	14,100	3,290	1,530	1,270	2,770
9	696	1,770	1,610	3,800	5,700	14,700	1,970	15,800	2,010	1,550	1,130	2,050
10	728	1,650	1,490	3,300	3,600	11,500	1,890	13,600	1,910	2,090	1,040	1,550
11	1,190	1,610	1,270	3,000	3,300	10,300	1,790	11,500	1,790	3,030	997	1,390
12	868	1,550	1,630	2,700	3,400	11,500	1,730	10,600	1,570	2,250	940	1,250
13	778	1,510	4,730	2,400	7,950	13,000	1,710	7,950	1,330	2,130	922	2,890
14	978	1,470	5,410	4,070	7,820	14,900	1,770	6,560	1,550	1,750	868	1,870
15	1,270	1,930	5,160	5,410	5,160	16,400	1,750	5,940	1,770	2,370	832	1,570
16	1,450	3,230	4,430	4,150	4,150	16,500	1,710	4,790	2,010	2,650	904	1,370
17	1,330	2,790	4,130	3,410	4,490	15,900	1,670	3,990	2,130	2,490	832	1,190
18	1,330	2,290	4,570	3,000	12,200	13,700	1,650	3,570	1,850	1,750	760	1,110
19	1,230	2,270	3,810	2,600	13,800	10,600	1,630	2,990	1,510	1,450	696	1,040
20	1,040	2,210	3,410	2,300	16,300	9,410	1,590	2,730	1,390	1,250	664	978
21	850	2,390	3,090	2,000	18,600	8,900	1,550	2,530	1,350	1,130	664	1,290
22	959	2,310	7,570	1,800	32,600	8,410	1,530	2,330	1,390	1,050	886	2,250
23	1,040	2,090	13,000	1,700	39,300	7,760	1,490	2,130	1,330	959	796	1,890
24	959	1,950	11,700	1,600	33,800	7,320	1,450	1,930	1,150	1,020	696	1,730
25	904	1,850	9,320	1,500	33,900	6,150	1,390	2,030	1,070	2,670	680	1,590
26	868	1,810	6,960	1,400	26,600	5,310	1,350	3,010	14,400	3,470	1,310	1,550
27	814	1,750	5,080	1,300	21,500	4,650	1,290	2,530	19,700	1,930	2,330	1,670
28	778	1,670	3,770	1,200	19,600	4,190	1,330	2,430	13,600	1,510	3,090	1,990
29	760	1,570	3,150	1,100	-----	3,750	1,430	2,470	10,100	1,350	1,810	1,750
30	778	1,550	2,870	1,100	-----	3,390	1,390	2,130	7,360	1,310	1,290	1,510
31	832	-----	2,670	1,000	-----	3,150	-----	1,850	-----	1,250	1,090	-----
TOTAL	29,582	64,438	125,010	99,980	367,870	326,540	54,880	142,940	107,110	66,879	38,567	46,147
MEAN	954	2,148	4,033	3,225	13,140	10,530	1,829	4,611	3,570	2,157	1,244	1,538
MAX	1,450	5,230	13,000	11,000	39,300	18,700	2,990	15,800	19,700	5,180	3,090	2,890
MIN	680	868	1,270	1,000	1,000	3,150	1,290	1,270	1,070	959	664	940
CAL YR 1970	TOTAL	1,780,534	MEAN	4,878	MAX	44,400	MIN	664				
WTR YR 1971	TOTAL	1,469,943	MEAN	4,027	MAX	39,300	MIN	664				

PEAK DISCHARGE (BASE, 24,000 CPS).--Feb. 23 (0500) 42,800 cfs (18.29 ft).

SCIOTO RIVER BASIN

119

03235500 Tar Hollow Creek at Tar Hollow State Park, Ohio

LOCATION.—Lat 39°23'22", long 82°45'03", in NE 1/4 sec. 36, T.10N., R.20W., Ross County, in Tar Hollow State Park, on left bank 2 miles upstream from mouth and 5.2 miles south of Adelphi.

DRAINAGE AREA.—1.35 sq mi.

PERIOD OF RECORD.—August 1946 to current year.

GAGE.—Water-stage recorder and V-notch weir. Datum of gage is 793.63 ft above mean sea level.

AVERAGE DISCHARGE.—25 years, 1.20 cfs (12.07 inches per year).

EXTREMES.—Current year: Maximum discharge, about 100 cfs Feb. 22; no flow many days.

Period of record: Maximum discharge 957 cfs May 24, 1968 (gage height 5.66 ft in gage well, 5.84 ft from floodmark) from rating curve extended above 92 cfs on basis of slope-area measurements at gage height 5.21 ft and at peak flow; no flow many days each year.

REMARKS.—Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.32	.32	.83	.25	1.0	.64	.18	.12	.18	.04	.03
2	.18	.79	.32	.69	.22	1.7	1.0	.18	.12	.12	.04	.03
3	.06	1.5	.32	.69	.19	1.5	.94	.24	.18	.06	.05	.03
4	.03	.69	.40	4.5	.58	1.3	.83	.32	.12	.03	.07	.03
5	.03	.48	.40	3.8	10	1.2	.83	.32	.06	.03	.05	0
6	.03	.48	.40	1.5	4.2	3.9	.83	5.3	.03	.03	.04	.07
7	.03	.40	.40	1.2	2.2	9.1	1.0	14	.03	.01	.03	.24
8	.01	.32	.40	1.0	1.7	4.2	1.0	12	.06	.01	.02	.24
9	.01	.24	.40	.84	1.2	2.5	.83	4.5	.03	0	.03	.24
10	.03	.24	.40	.76	1.0	2.5	.83	2.8	.01	.03	.05	.18
11	.03	.18	.63	.70	1.0	2.3	.83	1.9	.01	.83	.03	.18
12	.01	.18	3.2	.64	1.8	5.5	.58	1.7	.01	.58	.02	.18
13	.01	.18	2.3	.64	5.0	6.7	.58	2.3	.01	.32	.02	.18
14	.02	.28	1.5	4.2	1.9	4.2	.69	1.9	.03	.18	.01	.18
15	.12	.97	1.2	3.2	1.4	8.3	.58	1.5	.03	.12	.01	.12
16	.12	1.0	1.5	2.1	1.0	5.6	.58	1.4	.03	.06	0	.24
17	.18	.69	2.3	1.3	4.2	3.2	.58	1.2	.03	.03	0	.32
18	.12	.58	2.1	.88	5.0	2.5	.48	1.0	.01	.03	0	.32
19	.12	.48	1.7	.70	4.4	2.8	.40	.69	0	.03	0	.32
20	.12	.69	1.4	.62	4.8	2.3	.40	.58	0	.01	0	.24
21	.12	.69	1.5	.60	3.4	2.0	.40	.48	0	.01	0	.24
22	.12	.69	11	.60	18	1.9	.40	.40	0	0	0	.24
23	.12	.58	12	.60	8.8	1.5	.40	.40	0	0	0	.18
24	.06	.48	7.3	.60	4.5	1.4	.40	.40	0	.06	0	.12
25	.03	.48	3.8	.52	3.2	1.2	.40	.83	0	.18	.14	.06
26	.03	.40	2.5	.47	2.8	1.2	.40	.48	2.1	.18	1.4	.24
27	.03	.40	1.9	.45	2.5	1.0	.32	.40	.48	.18	.40	.32
28	.03	.48	1.5	.39	2.1	.83	.40	.32	.32	.06	.24	.24
29	.06	.40	1.2	.36	-----	.83	.32	.24	.40	.06	.12	.24
30	.18	.40	.83	.40	-----	.69	.24	.18	.32	.06	.06	.24
31	.24	-----	.83	.31	-----	.58	-----	.18	-----	.05	.03	-----
TOTAL	2.52	15.69	65.95	36.09	97.34	86.33	18.11	58.32	4.54	3.53	2.90	5.49
MEAN	.081	.52	2.13	1.16	3.48	2.78	.60	1.88	.15	.11	.094	.18
MAX	.24	1.5	12	4.5	18	9.1	1.0	14	2.1	.83	1.4	.32
MIN	.01	.18	.32	.31	.19	.58	.24	.18	0	0	0	0
CFSM	.06	.39	1.58	.86	2.58	2.06	.44	1.39	.11	.08	.07	.13
IN.	.07	.43	1.82	.99	2.68	2.38	.50	1.61	.13	.10	.08	.15
CAL YR 1970	TOTAL 487.95	MEAN 1.34	MAX 52	MIN 0	CFSM .99	IN 13.43						
WTR YR 1971	TOTAL 396.81	MEAN 1.09	MAX 18	MIN 0	CFSM .81	IN 10.93						

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	Unknown	Unknown	About 100	5-7	1930	2.97	60

SCIOTO RIVER BASIN

Reservoirs in Scioto River Basin

- 03220500 O'SHAUGHNESSY RESERVOIR.--Lat 40°09'14", long 83°07'33", Delaware County, in gate house of dam on Scioto River, 4 miles north of Dublin. Drainage area 979 sq mi. Period of record, October 1924 to current year. Water-stage recorder. Month-end contents only for some periods published in WSP 1305. Datum of gage is at mean sea level (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 19,600 acre-ft Feb. 23 (elevation 850.40 ft); minimum, 15,960 acre-ft Oct. 12 (elevation 846.79 ft). Extremes for period of record: Maximum contents, 24,240 acre-ft Jan. 22, 1959 (elevation 854.40 ft); minimum, 43 acre-ft Feb. 11, 1945 (elevation 791.97 ft). Reservoir is formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft, between elevations 799.5 ft (sill of outlet gate) and 845 ft (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,400 acre-ft, between elevations 845 ft (crest of spillway) and 847.9 ft (crest of flashboards). Dead storage below elevation 799.5 ft, 55 acre-ft. Figures given herein represent usable contents. Water used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.
- 03221500 GRIGGS RESERVOIR.--Lat 40°00'54", long 83°05'38", Franklin County, on left abutment of dam on Scioto River, 6.2 miles northwest of State Capitol building in Columbus, and 6.5 miles upstream from Olentangy River. Drainage area, 1,044 sq mi. Period of record, January 1911 to current year. Water-stage recorder. Month-end contents only for some periods, published in WSP 1305. Daily readings have been obtained by city of Columbus, Division of Water, since 1908. Datum of gage is 680.38 ft above mean sea level, adjustment of 1912 (levels by city of Columbus); gage readings have been reduced to elevations above mean sea level. Prior to Oct. 4, 1940 nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 5,590 acre-ft Feb. 22 (elevation 756.79 ft); minimum, 3,070 acre-ft Nov. 12 (elevation 753.90 ft). Extremes for period of record: Maximum contents, 7,490 acre-ft Jan. 22, 1959 (elevation 763.91 ft); minimum 38 acre-ft Jan. 24, 1945 (elevation 735.78 ft). Reservoir formed by concrete dam; dam completed and storage began in 1905. Usable capacity, 3,700 acre-ft between elevations 735.4 (lowest outlets) and 753.4 ft (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft, between elevations 753.4 ft (crest of spillway) and 755.6 ft (crest of flashboards). Dead storage below elevation, 735.4 ft, 239 acre-ft. Figures given herein represent usable contents. Water is used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.
- 03225000 DELAWARE RESERVOIR.--Lat 40°21'31", long 83°04'10", in T.5N., R.19W., Delaware County, in gate house of dam on Olentangy River, 4 miles north of Delaware. Drainage area, 386 sq mi. Period of record, March 1951 to current year. Water-stage recorder. Datum of gage is at mean sea level, Sandy Hook datum (levels by Corps of Engineers). Extremes for current year: Maximum contents, 26,400 acre-ft May 9, (elevation 923.04 ft); minimum, 8,100 acre-ft Mar. 4 (elevation 909.67 ft). Extremes for period of record: Maximum contents, 113,000 acre-ft Jan. 29, 1959 (elevation 944.75 ft); minimum, 2,070 acre-ft Feb. 13, 1970 (elevation 899.43 ft). Reservoir is formed by earthfill dam with concrete spillway; storage began Mar. 20, 1951. Usable capacity 24,500 acre-ft between elevations 884.0 ft (lowest outlet) and 922.0 ft (crest of spillway). Additional flood-control storage above elevation 922.0 ft by taintor gates on spillway, 107,500 acre-ft. Normal conservation pool storage 8,400 acre-ft (elevation 910.0 ft) winter, and 14,000 acre-ft (elevation, 915.0 ft) summer. No dead storage. Figures given herein represent usable contents. Reservoir is used primarily for flood control although the conservation pool is operated to augment low flow for water supply and pollution abatement and for recreational and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- 03226400 HOOVER RESERVOIR.--Lat 40°06'30", long 82°52'59", in T.2N., R.17W., Franklin County, in gate house of dam on Big Walnut Creek, 0.5 mile northeast of Central College, and 12 miles northeast of Columbus. Drainage area, 190 sq mi. Period of record, March 1955 to current year. Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 10, 1956, nonrecording gage at same site and datum. Extremes for current year: Maximum contents, 69,560 acre-ft Mar. 13 (elevation 893.28 ft); minimum, 36,300 acre-ft Dec. 12 (elevation 880.07 ft). Extremes for period of record: Maximum contents, 74,470 acre-ft Jan. 21, 1959 (elevation 894.76 ft); minimum, 19,910 acre-ft Mar. 1, 1964 (elevation 866.58 ft). Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft between elevations 830.0 ft (lowest outlet) and 890.0 ft (crest of spillway). Additional flood-control storage above elevation 890.0 ft by bascule gates installed in May 1970, 25,750 acre-ft. Dead storage below elevation 830.0 ft, 214 acre-ft. Figures given herein represent usable contents. Reservoir is used for municipal supply of city of Columbus and for recreational purposes. Outflow is controlled mostly by operation of valves in tunnel through dam, but above spillway level bascule gates can be used. Capacity table computed from data furnished by city of Columbus.
- 03230890 DEER CREEK RESERVOIR.--Lat 39°37'20", long 83°12'58", Pickaway County, in outlet tower of dam on Deer Creek, 1,000 ft upstream from Crownover Mill Road, and 2.0 miles east of Pancoastburg. Drainage area, 277 sq mi. Period of record, April 1968 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Extremes for current year: Maximum contents, 30,600 acre-ft June 27 (elevation 810.82 ft); minimum, 6,550 acre-ft Feb. 9 (elevation 796.17 ft). Extremes for period of record: Maximum contents, 71,830 acre-ft May 31, 1968 (elevation 835.25 ft); minimum, 1,140 acre-ft, Jan. 6, 1970 (elevation 764.75 ft). Reservoir formed by earthfill dam with concrete spillway; dam completed in 1968 and storage began April 1, 1968. Usable capacity 102,540 acre-ft between elevations 770.0 ft (lowest outlet) and 844.0 ft (crest of spillway). Additional flood-control storage above elevation 844.0 ft by taintor gates on spillway. Normal conservation pool storage 6,420 acre-ft (elevation 796.0 ft) winter, and 21,030 acre-ft (elevation 810.0 ft) summer. No dead storage. Figures given herein represent usable contents. Reservoir is used primarily for flood control although the conservation pool is operated to augment low flow for water supply and pollution abatement and for recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Gage-height chart and capacity table furnished by Corps of Engineers.

SCIOTO RIVER BASIN

121

Reservoirs in Scioto River basin

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-ft)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
	03220500	O'Shaughnessy Reservoir		03221500	Griggs Reservoir	
Sept. 30.....	847.13	16,260	-	755.05	4,260	-
Oct. 31.....	847.49	16,600	+340	754.60	4,110	-150
Nov. 30.....	848.23	17,290	+690	755.46	4,400	+290
Dec. 31.....	848.36	17,420	+130	755.76	4,500	+100
CAL YR 1970.....	-	-	-90	-	-	-10
Jan. 31.....	848.25	17,310	-110	755.60	4,450	-50
Feb. 20.....	849.27	18,340	+1,030	756.88	4,890	+440
Mar. 31.....	848.46	17,520	-820	755.92	4,550	-340
Apr. 30.....	848.30	17,360	-160	755.68	4,470	-80
May 31.....	848.42	17,480	+120	755.65	4,530	+60
June 30.....	848.47	17,530	+50	755.84	4,530	0
July 31.....	848.27	17,330	-200	755.65	4,460	-70
Aug. 31.....	847.46	16,570	-760	755.05	4,260	-200
Sept. 30.....	847.53	16,630	+60	755.08	4,270	+10
WTR YR 1971.....	-	-	+370	-	-	+10

	03225000	Delaware Reservoir		03228400	Hoover Reservoir	
Sept. 30.....	913.92	12,610	-	884.36	*46,070	-
Oct. 31.....	912.82	11,380	-1,230	881.80	39,760	-6,270
Nov. 30.....	910.35	8,750	-2,630	880.40	36,940	-2,820
Dec. 31.....	910.34	8,740	-10	882.61	41,510	+4,570
CAL YR 1970.....	-	-	+6,200	-	-	-3,480
Jan. 31.....	910.23	8,630	-110	881.05	39,870	+1,640
Feb. 20.....	910.76	9,180	+550	891.04	62,970	+23,100
Mar. 31.....	910.42	8,820	-360	890.90	62,590	-380
Apr. 30.....	915.11	14,140	+5,320	881.58	59,000	-3,590
May 31.....	915.10	14,130	-10	891.17	63,340	+4,340
June 30.....	915.27	14,350	+220	889.55	58,920	-4,420
July 31.....	914.98	13,970	-380	887.23	52,780	-6,140
Aug. 31.....	914.75	13,680	-290	884.55	46,010	-6,770
Sept. 30.....	914.46	13,300	-380	882.05	40,290	-5,720
WTR YR 1971.....	-	-	+690	-	-	-5,740

	03230890	Deer Creek Reservoir	
Sept. 30.....	809.70	20,650	-
Oct. 31.....	809.88	20,880	+230
Nov. 30.....	796.40	6,720	-14,160
Dec. 31.....	796.70	6,950	+230
CAL YR 1970.....	-	-	+5,560
Jan. 31.....	796.50	6,800	-150
Feb. 20.....	808.81	19,540	+12,740
Mar. 31.....	796.92	7,120	-12,420
Apr. 30.....	801.40	11,200	+4,080
May 31.....	810.30	21,420	+10,220
June 30.....	813.20	25,310	+3,890
July 31.....	810.37	21,510	-3,800
Aug. 31.....	810.35	21,480	-30
Sept. 30.....	802.43	12,260	-9,220
WTR YR 1971.....	-	-	-8,390

* Corrected.

03237280 Upper Twin Creek at McGaw, Ohio
(Hydrologic bench-mark station)

LOCATION.--Lat 38°36'14", long 83°13'31", Scioto County, on right bank at downstream side of bridge on U.S. Highway 52 at McGaw, 2 miles northeast of Buena Vista, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--12.6 sq mi.

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.00 ft above mean sea level. (Ohio Department of Highways bench mark).

AVERAGE DISCHARGE.--8 years, 11.2 cfs (11.68 inches per year).

EXTREMES.--Current year: Maximum discharge, 236 cfs Dec. 22; maximum gage height 4.06 ft Feb. 5 (ice jam); minimum 0.05 cfs Aug. 21, 22.

Period of record: Maximum discharge, 3,500 cfs Mar. 4, 1964 (gage height, 9.7 ft, in gage well, 10.2 ft, from outside high-water mark); no flow for many days most years.

Flood of July 3, 1960 reached a stage of 11.62 ft (discharge, 7,230 cfs), on basis of contracted-opening and flow over road measurement of peak flow.

REMARKS.--Records poor. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.9	3.4	6.6	4.6	17	5.3	6.2	7.4	2.3	1.9	1.6
2	1.1	3.6	3.4	5.8	2.8	15	5.8	17	8.6	1.4	1.6	2.1
3	.84	7.4	3.4	5.4	2.1	15	5.8	15	8.6	.95	1.2	5.0
4	.76	5.4	5.0	9.6	15	13	5.4	16	7.8	.65	12	4.6
5	.70	3.8	5.4	44	11.3	13	5.0	25	7.0	.42	10	3.4
6	.65	2.8	5.0	20	54	22	5.0	64	6.6	1.3	6.2	3.8
7	.60	2.1	4.6	10	36	38	5.4	53	7.4	1.1	4.2	16
8	.55	1.7	4.2	7.4	22	30	5.0	50	9.0	.76	2.8	6.2
9	.55	1.7	3.8	5.4	18	23	4.6	34	8.2	.55	2.1	5.4
10	.76	1.7	3.8	4.2	15	25	4.2	23	7.8	1.5	1.6	3.8
11	1.2	1.4	4.2	3.8	13	37	3.8	18	6.6	4.6	1.2	3.1
12	1.6	1.2	44	3.4	25	35	3.4	15	6.2	3.8	1.1	1.1
13	1.2	1.1	12	5.6	44	28	3.4	42	8.6	2.5	.76	3.1
14	10	2.2	9.4	88	30	22	4.2	34	11	1.4	.50	3.1
15	10	24	9.4	32	23	22	3.4	23	17	.84	.28	3.1
16	4.6	14	9.0	24	18	21	3.4	19	13	.55	.15	3.1
17	2.8	9.0	17	18	16	18	3.4	21	7.8	.60	.11	4.2
18	1.9	6.6	10	14	16	16	3.4	17	6.2	2.1	.09	4.6
19	1.4	9.0	10	12	15	16	3.1	12	4.6	15	.08	3.8
20	1.7	12	9.8	9.4	15	15	2.4	13	3.8	11	.07	3.4
21	1.4	14	20	8.6	13	14	3.1	15	7.8	9.8	.06	3.1
22	1.9	10	135	7.4	70	13	3.1	14	12	3.1	15	3.1
23	1.9	7.8	72	6.6	40	10	2.9	12	9.6	1.9	9.1	3.1
24	1.4	5.4	53	5.4	27	7.4	2.8	10	6.2	1.2	4.2	3.1
25	1.7	3.8	31	4.6	23	6.6	2.5	12	5.0	1.4	3.5	3.1
26	1.6	3.4	19	5.0	20	7.0	2.5	8.6	24	2.8	48	6.9
27	1.4	3.4	15	6.2	21	6.6	2.5	9.8	13	2.8	16	7.4
28	1.1	2.8	14	3.8	17	6.2	12	9.0	7.0	2.1	6.6	5.4
29	1.4	2.5	12	3.8	-----	5.8	9.0	8.6	5.4	2.8	3.1	3.8
30	1.7	3.1	9.8	4.6	-----	5.8	6.6	7.8	3.4	2.8	1.4	3.1
31	1.9	-----	6.2	6.2	-----	5.4	-----	7.0	-----	2.5	1.2	-----
TOTAL	62.71	165.2	566.8	477.6	725.5	528.8	132.4	624.0	260.6	82.52	156.10	130.6
MEAN	2.02	5.51	18.3	15.4	25.3	17.1	4.41	20.1	8.69	2.66	5.04	4.35
MAX	10	24	136	96	110	38	12	64	29	15	48	16
MIN	.55	1.1	3.4	3.4	2.1	5.4	2.5	6.2	3.4	.42	.06	1.6
CF54	.16	.43	1.43	1.29	2.02	1.34	.34	1.57	.68	.21	.39	.34
IN.	.18	.48	1.65	1.39	2.11	1.54	.38	1.81	.76	.24	.45	.38

CAL YR 1970 TOTAL 4,342.04 MEAN 11.9 MAX 366 MIN .22 CF54 .93 IN 12.62
WTR YR 1971 TOTAL 3,912.83 MEAN 10.7 MAX 136 MIN .06 CF54 .84 IN 11.37

PEAK DISCHARGE (BASE, 450 CFS).--No peak above base.

03237500 Ohio Brush Creek near West Union, Ohio

LOCATION.—Lat 38°48'13", long 83°25'16", Adams County, on right bank at downstream side of bridge on State Highway 348, 0.3 mile downstream from Cedar Run, 7 miles east of West Union, and 7.1 miles upstream from Beasley Fork.

DRAINAGE AREA.—367 sq mi.

PERIOD OF RECORD.—August 1926 to November 1935, September 1940 to current year.

GAGE.—Water-stage recorder. Datum of gage is 510.6 ft above mean sea level, adjustment of 1912. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.—40 years, 434 cfs (15.23 inches per year).

EXTREMES.—Current year: Maximum discharge, 26,300 cfs Feb. 22 (gage height, 20.67 ft); minimum, 6.7 cfs Oct. 9, 10.
Period of record: Maximum discharge, 59,200 cfs Mar. 10, 1964 (gage height, 27.91 ft), from rating curve extended above 22,000 cfs on basis of slope-area measurement of peak flow; no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

REMARKS.—Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WSP 1906: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	60	115	140	64	440	148	48	71	83	40	64
2	40	698	108	130	58	370	260	52	62	62	36	128
3	29	920	96	130	40	336	292	68	53	55	33	1,050
4	21	284	108	2,740	872	320	195	77	52	43	4,050	2,300
5	16	195	105	1,780	5,200	312	162	70	43	33	1,720	545
6	13	153	92	578	1,040	698	145	234	36	25	510	435
7	10	113	79	260	530	3,160	143	866	45	20	284	1,160
8	9.1	92	71	210	370	1,040	133	1,440	530	16	189	365
9	7.7	75	68	190	234	614	120	596	390	15	138	219
10	8.6	66	66	180	210	764	113	296	133	115	110	156
11	12	58	71	170	230	2,180	100	201	73	1,600	94	130
12	19	53	987	160	626	2,630	94	198	52	555	71	12
13	23	50	698	170	2,790	1,480	96	710	43	174	58	812
14	73	64	328	2,300	896	818	100	596	43	90	46	308
15	360	1,030	231	1,230	566	1,550	100	296	68	55	37	192
16	195	430	272	545	370	1,080	90	213	90	37	32	225
17	103	231	1,370	380	1,210	596	85	987	55	32	27	908
18	70	174	644	284	1,790	440	83	470	36	2,060	23	360
19	50	145	385	222	900	465	75	248	27	1,320	21	219
20	45	1,080	284	204	1,410	614	70	180	20	500	18	189
21	48	794	370	177	878	535	66	143	66	201	15	162
22	62	352	3,850	174	13,900	440	66	118	210	118	292	120
23	75	260	2,500	174	2,630	356	66	100	96	81	120	90
24	58	189	1,550	159	1,040	296	62	90	52	73	105	85
25	46	140	674	150	686	256	53	842	29	138	590	73
26	39	133	425	130	578	240	53	440	3,900	248	2,520	1,670
27	33	133	300	90	1,020	225	55	204	692	168	902	854
28	28	128	220	84	614	207	48	143	256	133	360	525
29	27	113	190	80	-----	198	55	118	156	85	106	272
30	32	105	170	76	-----	177	53	100	113	57	118	192
31	43	-----	150	72	-----	156	-----	85	-----	48	85	-----
TOTAL	1,653.4	8,318	16,577	13,369	40,932	22,993	3,181	10,169	7,492	8,240	12,830	14,726
MEAN	53.3	277	535	431	1,462	742	106	328	250	266	414	491
MAX	360	1,080	3,850	2,740	13,900	3,160	292	1,440	3,900	2,060	4,050	2,300
MIN	7.7	50	66	72	58	156	48	48	20	15	15	66
CFSM	.14	.72	1.38	1.11	3.78	1.92	.27	.85	.65	.69	1.07	1.27
IN.	.16	.80	1.59	1.29	3.93	2.21	.31	.98	.72	.79	1.23	1.42

CAL YR 1970 TOTAL 157,487.8 MEAN 431 MAX 18,600 MIN 5.0 CFSM 1.11 IN 15.14
WTR YR 1971 TOTAL 160,480.4 MEAN 440 MAX 13,900 MIN 7.7 CFSM 1.14 IN 15.43

PEAK DISCHARGE (BASE, 11,000 CFS).—Feb. 22 (1615) 26,300 cfs (20.67 ft).

WHITEOAK CREEK BASIN

03238500 Whiteoak Creek near Georgetown, Ohio

LOCATION.--Lat 38°50'42", long 83°55'16", Brown County, on left bank at upstream side of bridge on State Highway 221, 600 ft downstream from Opossum Run, 1.8 miles southwest of Georgetown, and 6.5 miles upstream from mouth.

DRAINAGE AREA.--222 sq mi.

PERIOD OF RECORD.--October 1923 to November 1935, October 1939 to current year.

GAGE.--Nonrecording gage read twice daily. Since Nov. 7, 1950 supplementary water-stage recorder for high-water periods when stage exceeds 6.85 ft. Datum of gage is 569.21 ft above mean sea level, adjustment of 1912. Prior to Feb. 8, 1940, and Dec. 9, 1948, to Sept. 30, 1949, nonrecording gage and Feb. 8, 1940, to Dec. 8, 1948, water-stage recorder at same site at datum 8.00 ft higher.

AVERAGE DISCHARGE.--44 years, 242 cfs (14.80 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,100 cfs Feb. 22 (gage height, 9.30 ft); minimum 1.8 cfs Aug. 19.

Period of record: Maximum discharge, 22,400 cfs Mar. 10, 1964; maximum gage height, 20.87 ft, present datum, May 14, 1933; no flow at times in 1930, 1940-41, 1943, 1948, 1951-53, 1959, 1969, 1970.

REVISIONS.--The maximum discharge for the water year 1970 has been revised to 12,300 cfs Apr. 2, 1970 (gage height 10.48 ft), superseding figure published in WRD Ohio 1970.

REMARKS.--Records fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1924-31, WSP 758: 1933, WSP 1908: Drainage area. Revised figures of discharge, in cubic feet per second, for the high water periods in water year 1970, superseding figures published in WRD Ohio 1970 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
Apr. 2.....	9,900	Apr. 23.....	3,060	Apr. 25.....	2,490
3.....	2,990	24.....	5,410	Aug. 10.....	3,060

Month	Cfs-days	Mean	Maximum	Minimum	Per square mile	Runoff in inches
April 1970.....	30,600	1,022	9,900	87	4.61	5.13
August 1970.....	4,985.65	161	3,060	.70	.73	.84
WTR YR 1970.....	92,379.57	253	9,900	0	1.14	15.48

REVISED PEAK DISCHARGE.--1970: Apr. 2 (1900) 12,300 cfs (10.48 ft); Apr. 24 (2100) 6,630 cfs (7.85 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	32	39	48	29	158	46	14	18	46	31	33
2	26	782	41	56	28	122	71	18	14	31	24	192
3	21	649	39	82	30	112	96	20	8.5	18	20	2,680
4	16	153	37	2,270	259	102	69	16	5.7	33	1,470	3,720
5	14	120	37	1,530	2,330	98	56	19	5.0	15	1,430	846
6	14	101	36	302	568	164	49	26	3.9	6.3	227	224
7	12	88	31	140	216	2,050	44	111	96	4.2	110	1,310
8	11	72	29	110	135	559	42	387	535	3.0	68	288
9	9.9	66	27	90	92	228	37	219	120	2.4	49	136
10	11	62	26	80	96	306	33	96	56	33	33	87
11	10	60	27	70	110	1,990	31	63	31	1,640	24	120
12	8.4	58	213	68	233	2,060	29	56	20	228	17	401
13	9.3	51	402	120	1,470	683	26	158	7.2	116	14	717
14	28	60	144	1,780	465	282	29	196	11	58	8.5	204
15	121	220	85	1,140	290	487	26	101	12	33	6.3	117
16	100	222	108	302	168	564	26	68	7.2	20	4.4	84
17	50	116	764	191	897	206	24	768	5.0	10	4.4	110
18	33	90	355	146	1,830	135	22	418	3.0	358	3.6	88
19	26	75	159	120	1,150	159	22	110	3.0	255	2.6	62
20	29	281	114	110	1,580	304	18	72	45	156	3.0	54
21	56	428	127	100	859	219	18	51	53	72	2.6	50
22	145	132	2,270	98	7,430	164	18	42	124	37	119	57
23	76	82	2,910	94	3,510	131	19	31	82	19	252	48
24	52	56	1,440	90	500	98	16	26	44	14	77	37
25	39	44	325	86	254	84	16	106	18	17	36	31
26	33	37	183	82	226	78	8.5	179	47	147	1,720	1,130
27	28	37	120	40	996	73	12	82	845	227	998	1,150
28	24	38	86	37	330	67	16	55	126	140	341	353
29	22	34	70	34	-----	66	14	37	67	77	108	152
30	21	38	62	31	-----	61	14	29	78	101	69	96
31	25	-----	54	30	-----	50	-----	22	-----	52	49	-----
TOTAL	1,106.6	4,284	10,360	9,477	26,091	11,860	947.5	3,596	2,602.5	3,968.9	7,321.4	14,577
MEAN	35.7	143	334	306	932	383	31.6	116	86.8	128	236	486
MAX	145	782	2,910	2,270	7,430	2,060	96	768	845	1,640	1,720	3,720
MIN	8.4	32	26	30	28	50	8.5	14	3.0	2.4	2.6	31
CFSM	.16	.64	1.50	1.38	4.20	1.73	.14	.52	.39	.58	1.06	2.19
IN.	.13	.72	1.74	1.59	4.37	1.99	.16	.60	.44	.67	1.23	2.44

CAL YR 1970 TOTAL 105,543.22 MEAN 289 MAX 9,900 MIN .58 CFMS 1.30 IN 17.69
WTR YR 1971 TOTAL 96,191.90 MEAN 264 MAX 7,430 MIN 2.4 CFMS 1.19 IN 16.12

PEAK DISCHARGE (BASE, 5,500 CFS).--Feb. 22 (2130) 10,100 cfs (9.30 ft).

LITTLE MIAMI RIVER BASIN

125

03240000 Little Miami River near Oldtown, Ohio

LOCATION.--Lat 39°44'54", long 83°55'53", in sec. 34, R.7, T.4, Greene County, on right bank at downstream side of bridge on U.S. Highway 68, 0.8 mile downstream from Conner Branch, 0.9 mile upstream from Massies Creek, and 1.3 miles northeast of Oldtown.

DRAINAGE AREA.--129 sq mi.

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 99.1 cfs (10.43 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,040 cfs June 26 (gage height, 7.49 ft); minimum 9.4 cfs Oct. 7, 8.
Period of record: Maximum discharge, 14,800 cfs Jan. 21, 1959 (gage height, 12.20 ft), from rating curve extended above 4,400 cfs on basis of slope-area measurement of peak flow; minimum, 5.4 cfs July 29, 1954 (result of temporary storage at rock dam upstream).

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	21	20	13	179	77	45	38	127	36	17
2	12	17	19	20	13	156	88	48	42	108	34	18
3	13	20	20	19	12	138	76	46	41	76	32	24
4	12	18	27	80	240	116	68	41	39	64	38	28
5	12	22	23	116	869	112	64	42	35	57	43	22
6	11	18	20	71	254	144	62	121	31	53	37	23
7	9.6	17	18	60	126	373	61	158	32	47	33	24
8	10	16	18	52	70	232	58	367	29	43	32	25
9	11	16	19	46	64	158	59	249	31	41	31	23
10	11	18	23	42	58	156	58	163	30	49	29	22
11	12	19	22	40	54	147	56	128	26	63	25	20
12	15	20	29	38	76	178	56	115	28	52	24	20
13	19	15	42	37	136	344	54	100	27	45	23	23
14	19	18	32	46	82	281	63	89	27	43	21	22
15	18	20	26	49	70	291	54	76	34	40	21	16
16	15	18	27	36	54	292	49	71	31	40	21	14
17	13	20	39	30	429	205	52	69	27	39	21	16
18	13	16	46	26	575	167	49	62	23	38	19	19
19	14	18	36	24	455	162	45	57	23	36	19	19
20	16	21	29	22	569	148	46	54	22	34	19	34
21	18	22	28	21	266	127	49	51	25	33	20	30
22	19	22	51	22	906	122	48	51	23	32	29	24
23	17	19	78	22	715	119	42	51	21	31	43	20
24	17	16	54	23	276	110	42	52	21	78	26	19
25	16	13	40	22	198	104	41	72	19	110	21	19
26	16	15	30	20	224	99	40	59	1,550	59	23	24
27	15	18	27	18	335	90	40	48	649	45	24	22
28	16	19	24	16	234	86	56	49	228	44	21	21
29	14	17	23	15	-----	82	49	45	152	41	19	20
30	23	21	22	15	-----	79	46	41	120	42	18	21
31	19	-----	21	14	-----	77	-----	39	-----	40	18	-----
TOTAL	458.6	546	934	1,082	7,373	5,074	1,648	2,659	3,424	1,650	820	646
MEAN	14.8	18.2	30.1	34.9	263	164	54.9	85.8	114	53.2	26.5	21.5
MAX	23	22	78	116	906	373	88	367	1,550	127	43	34
MIN	9.6	13	18	14	12	77	40	39	19	31	18	14
CFSM	.11	.14	.23	.27	2.04	1.27	.43	.67	.88	.41	.21	.17
IN.	.13	.16	.27	.31	2.13	1.46	.48	.77	.99	.48	.24	.19

CAL YR 1970 TOTAL 35,372.6 MEAN 96.9 MAX 2,490 MIN 9.6 CFSM .75 IN 10.20
WTR YR 1971 TOTAL 26,314.6 MEAN 72.1 MAX 1,550 MIN 9.6 CFSM .56 IN 7.59

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0315	5.98	1,350	2-22	2300	6.35	1,500
2-17	1930	5.50	1,160	6-26	0630	7.49	2,040

LITTLE MIAMI RIVER BASIN

03241500 Massie Creek at Wilberforce, Ohio

LOCATION.--Lat 39°43'21", long 83°52'56", Greene County, on right bank at upstream side of bridge on Wilberforce-Clinton Road, 0.5 mile northwest of Wilberforce, 0.6 mile downstream from unnamed right bank tributary and 1.7 miles upstream from Clark Run.

DRAINAGE AREA.--63.2 sq mi.

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 54.2 cfs (11.64 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,630 cfs June 26 (gage height, 8.63 ft); minimum 2.9 cfs Oct. 4, 8, 9, but may have been less during period of ice effect.

Period of record: Maximum discharge, 7,300 cfs Jan. 21, 1959, Mar. 4, 1963, (gage height, 11.25 ft), from rating curve extended above 2,100 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.3 cfs Sept. 3-7, 1954; minimum gage height, 1.37 ft Sept. 7, 8, 9, 10, 11, 1964.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	6.6	7.4	8.8	4.0	128	31	14	15	86	14	5.3
2	3.5	7.0	6.8	8.2	3.8	106	34	16	14	74	13	5.8
3	3.4	7.5	7.0	9.0	3.6	90	29	20	13	60	21	11
4	3.3	7.6	7.6	65	4.0	69	27	17	12	50	52	12
5	3.3	7.2	12	82	67	64	26	16	11	56	53	9.3
6	3.6	6.8	8.8	32	106	122	23	68	11	54	37	8.1
7	3.7	6.5	7.6	27	69	298	25	118	13	46	28	11
8	3.2	6.4	7.2	24	39	173	23	300	11	30	22	17
9	3.4	6.2	8.2	22	28	109	21	191	9.4	24	18	12
10	4.1	6.1	9.2	21	25	101	20	123	8.8	26	15	9.7
11	4.0	6.1	9.8	20	27	90	19	90	8.3	35	14	11
12	5.3	6.3	13	19	69	123	20	74	8.3	33	12	9.8
13	7.8	6.0	22	18	62	249	20	60	8.8	26	11	8.7
14	6.7	6.5	16	27	41	195	21	47	7.8	22	9.8	7.5
15	4.9	8.4	11	18	38	223	18	40	14	21	9.1	6.8
16	4.9	7.0	12	14	34	209	18	38	8.8	19	8.8	6.4
17	5.3	7.0	17	13	298	138	17	35	6.9	17	7.9	6.3
18	5.0	6.6	26	12	403	107	16	33	6.0	14	6.7	6.0
19	4.5	6.4	17	11	305	104	15	31	6.0	15	6.2	5.9
20	5.9	8.9	13	10	393	92	15	30	6.0	13	5.7	14
21	8.7	9.2	12	11	193	75	16	27	8.3	11	5.0	16
22	7.1	8.4	20	10	814	71	16	27	7.8	9.7	7.3	16
23	6.3	7.2	62	10	572	64	15	26	6.0	9.1	9.1	13
24	5.3	5.6	49	9.4	215	55	15	25	5.6	36	7.8	11
25	5.2	5.7	25	8.6	157	49	14	33	6.7	55	6.7	11
26	5.3	6.3	18	7.0	189	47	13	26	1,340	32	15	19
27	5.8	6.2	15	6.4	249	42	14	21	882	24	14	23
28	6.2	6.7	13	6.0	169	41	22	20	243	19	10	21
29	6.4	6.4	12	5.6	-----	38	17	18	139	26	7.9	17
30	7.6	6.9	11	5.0	-----	33	15	17	80	21	6.9	16
31	6.9	-----	10	4.4	-----	30	-----	16	-----	18	5.7	-----
TOTAL	160.0	205.7	485.6	544.4	4,577.4	3,335	595	1,617	2,917.5	981.8	459.6	346.6
MEAN	5.16	6.86	15.7	17.6	163	108	19.8	52.2	97.3	31.7	14.8	11.6
MAX	8.7	9.2	62	82	814	298	34	300	1,340	86	53	23
MIN	3.2	5.6	6.8	4.4	3.6	30	13	14	5.6	9.1	5.0	5.3
CFSM	.08	.11	.25	.28	2.58	1.71	.31	.83	1.54	.50	.23	.18
IN.	.09	.12	.29	.32	2.69	1.96	.35	.95	1.72	.58	.27	.20

CAL YR 1970 TOTAL 19,050.2 MEAN 52.2 MAX 1,340 MIN 2.4 CFSM .83 IN 11.21
WTR YR 1971 TOTAL 16,225.6 MEAN 44.5 MAX 1,340 MIN 3.2 CFSM .70 IN 9.55

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-17	1730	5.25	710	6-26	0530	8.63	2,630
2-22	2100	5.98	1,000				

LITTLE MIAMI RIVER BASIN

127

03242050 Little Miami River near Spring Valley, Ohio

LOCATION.--Lat 39°35'00", long 84°01'49", Greene County, on right bank at downstream side of bridge on New Burlington road, 0.3 mile upstream from unnamed right bank tributary, 2.2 miles southwest of Spring Valley, and 2.8 miles downstream from Gladly Run.

DRAINAGE AREA.--366 sq mi.

PERIOD OF RECORD.--September 1925 to December 1935 and October 1939 to December 1951 (published as "at Spring Valley"), July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 729.29 ft above mean sea level. Prior to Dec. 12, 1939 nonrecording gage and Dec. 13, 1939 to Dec. 31, 1951 water-stage recorder at site 2.5 miles upstream at datum 0.6 ft higher.

AVERAGE DISCHARGE.--25 years (1925-35, 1939-51, 1969-71), 367 cfs (13.62 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,720 cfs Feb. 22 (gage height 10.59 ft); minimum 49 cfs Oct. 10.

Period of record: Maximum discharge 10,400 cfs Feb. 26, 1929 (gage height 16.8 ft site and datum then in use); minimum, 23 cfs July 27, 1934.

Flood of Jan. 21, 1959 reached a stage of 19.2 ft at present site and datum (discharge, 36,400 cfs).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 093: 1932(M). WSP 1053: 1929. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	68	79	100	44	583	240	130	124	330	102	68
2	62	128	77	100	42	511	346	126	128	298	93	72
3	59	134	83	200	40	463	270	198	124	246	196	124
4	56	85	134	623	200	403	236	144	116	231	223	179
5	53	82	98	398	2,340	378	218	130	110	252	235	169
6	54	77	89	260	968	711	209	749	105	252	186	233
7	53	71	79	220	412	1,240	205	770	1,410	209	150	246
8	52	67	77	190	280	795	196	1,750	225	131	131	140
9	52	66	76	170	260	544	188	880	174	130	121	119
10	58	70	76	160	240	517	181	583	155	170	116	105
11	56	68	79	152	225	577	175	454	136	220	112	288
12	57	68	250	140	457	669	171	395	127	200	102	94
13	152	67	212	223	595	904	173	343	130	170	94	131
14	122	65	171	227	466	798	207	301	137	145	89	112
15	106	94	138	177	306	992	177	263	142	125	84	103
16	77	76	156	140	188	904	167	238	128	122	83	88
17	68	72	294	120	1,300	651	163	250	115	118	82	83
18	63	71	225	110	2,150	532	160	212	104	110	78	81
19	60	66	190	100	1,340	535	148	192	98	110	76	81
20	75	152	150	100	1,810	514	144	186	94	100	74	305
21	126	154	156	100	908	439	148	169	168	100	75	246
22	82	104	478	98	3,090	403	154	156	118	98	122	158
23	74	84	392	92	2,830	386	140	154	99	96	105	131
24	68	76	343	86	1,040	351	132	279	89	220	98	114
25	65	70	268	80	711	328	130	382	86	340	83	103
26	62	70	188	68	721	311	124	209	2,500	180	151	211
27	63	74	160	60	988	291	124	189	1,500	158	119	145
28	60	75	140	54	763	277	223	152	860	119	90	134
29	63	71	120	50	-----	268	154	146	500	184	79	119
30	98	89	110	48	-----	250	136	132	380	125	72	111
31	77	-----	110	46	-----	238	-----	126	-----	115	72	-----
TOTAL	2,234	2,514	5,198	4,692	24,714	16,763	5,439	10,368	10,182	5,404	3,493	4,333
MEAN	72.1	83.8	168	151	883	541	181	334	339	174	113	144
MAX	152	154	478	623	3,090	1,240	346	1,750	2,500	340	235	305
MIN	52	65	76	46	40	238	124	126	86	96	72	68
CFSM	.20	.23	.46	.41	2.41	1.48	.49	.91	.93	.48	.31	.39
IN.	.23	.26	.53	.48	2.51	1.70	.55	1.05	1.03	.55	.36	.44

CAL YR 1970 TOTAL 115,788 MEAN 317 MAX 5,140 MIN 52 CFSM .87 IN 11.77
WTR YR 1971 TOTAL 95,334 MEAN 261 MAX 3,090 MIN 40 CFSM .71 IN 9.69

PEAK DISCHARGE (BASE, 3,600 CFS).--Feb. 22 (1600) 3,720 cfs (10.59 ft).

LITTLE MIAMI RIVER BASIN

03242150 Caesar Creek near Xenia, Ohio

LOCATION.--Lat 39°37'25", long 83°54'09", Greene County, on left bank at downstream side of bridge on Winchester Road, 0.2 mile downstream from unnamed left bank tributary, 4.5 miles south of Xenia, and 7.4 miles upstream from Anderson Fork.

DRAINAGE AREA.--71.4 sq mi.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 894.18 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge 2,640 cfs June 26 (gage height 11.57 ft); minimum daily, 0.44 cfs Oct. 9.
Period of record: Maximum discharge 2,820 cfs Apr. 2, 1970 (gage height 11.86 ft); minimum daily 0.44 cfs Oct. 9, 1970.

REMARKS.--Records good except those for winter periods and those below 5 cfs between June 18 and Sept. 17, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.4	9.2	16	9.4	123	23	10	12	50	7.1	2.8
2	.72	2.4	7.6	15	9.2	115	29	11	10	33	6.5	3.0
3	.72	3.3	7.6	14	9.0	97	24	16	12	24	6.4	5.0
4	.56	4.5	6.9	230	277	81	21	12	11	19	20	8.6
5	.56	3.9	6.3	118	543	70	19	11	10	16	21	7.4
6	.56	3.3	5.1	58	103	234	19	118	9.3	15	13	10
7	.50	2.8	4.8	40	55	340	19	222	19	13	9.7	14
8	.50	2.4	4.5	32	34	166	18	533	11	11	7.7	7.7
9	.44	2.2	4.2	26	32	104	17	232	9.3	34	6.5	6.0
10	.50	2.2	3.6	22	29	104	16	113	8.0	24	5.7	5.1
11	.64	2.2	5.5	20	26	110	14	118	7.4	39	5.0	9.0
12	.80	2.1	45	18	103	201	15	95	7.1	26	4.2	8.6
13	1.8	2.1	32	20	104	256	16	48	7.4	16	3.6	6.3
14	3.3	2.2	20	61	67	173	17	37	7.1	12	3.2	5.0
15	3.9	6.3	15	39	34	290	15	30	7.1	10	3.0	3.2
16	1.8	87	16	27	26	182	14	28	7.1	9.7	2.8	2.4
17	1.3	77	48	23	536	99	14	30	6.0	8.3	2.6	2.6
18	1.2	64	32	20	373	76	14	25	5.1	7.4	2.4	2.6
19	1.2	57	26	17	308	81	13	23	4.8	7.4	2.2	2.4
20	1.6	50	20	16	444	69	12	23	4.6	7.1	2.0	5.4
21	3.3	36	20	15	179	55	14	20	6.3	6.0	1.8	13
22	4.5	28	156	14	1,420	53	14	18	5.7	5.4	1.6	7.4
23	2.8	23	121	14	379	47	12	17	5.1	5.1	1.5	5.1
24	2.1	19	85	13	220	39	12	16	4.8	19	1.5	3.9
25	1.9	16	55	13	162	36	11	29	4.4	24	2.4	3.4
26	1.8	14	35	12	215	34	11	22	1,550	16	12	5.7
27	1.8	13	26	11	251	31	11	18	365	15	8.0	6.3
28	1.8	12	22	11	158	31	15	16	126	10	4.6	4.9
29	1.7	10	20	10	-----	28	12	16	76	14	3.6	3.6
30	2.4	9.2	18	10	-----	24	11	15	56	11	4.0	3.2
31	2.4	-----	17	9.8	-----	22	-----	14	-----	9.0	3.4	-----
TOTAL	50.00	559.5	894.3	964.8	6,105.6	3,371	472	1,936	2,374.6	516.4	179.0	173.6
MEAN	1.61	18.7	28.8	31.1	218	109	15.7	62.5	79.2	16.7	5.77	5.79
MAX	4.5	87	156	230	1,420	340	29	533	1,550	50	21	14
MIN	.44	2.1	3.6	9.8	9.0	22	11	10	4.4	5.1	1.5	2.4
CFSM	.02	.26	.40	.44	3.05	1.53	.22	.88	1.11	.23	.08	.08
IN.	.03	.29	.47	.50	3.18	1.76	.25	1.01	1.24	.27	.09	.09

CAL YR 1970 TOTAL 20,979.10 MEAN 57.5 MAX 1,990 MIN .44 CFSM .81 IN 10.93
WTR YR 1971 TOTAL 17,596.80 MEAN 48.2 MAX 1,550 MIN .44 CFSM .68 IN 9.17

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-17	1700	9.13	1,370	6-26	1130	11.57	2,640
2-22	0830	11.12	2,370				

LITTLE MIAMI RIVER BASIN

129

03242200 Anderson Fork near New Burlington, Ohio

LOCATION.--Lat 39°33'59", long 83°54'10", Clinton County, on right bank at downstream side of bridge on Old Winchester Trail, 1.0 mile downstream from Painters Run, 3.4 miles east of New Burlington, and 5.0 miles upstream from mouth.

DRAINAGE AREA.--77.8 sq mi.

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 883.67 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,540 cfs Feb. 22 (gage height 11.93 ft); minimum daily discharge 0.24 cfs Oct. 7.
Period of record: Maximum discharge, 2,610 cfs Apr. 2, 1970 (gage height 12.22 ft); minimum, 0.08 cfs Sept. 24, 25, 1970.

REMARKS.--Records good except those for winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.95	.95	16	9.4	134	32	12	13	51	6.8	3.5
2	.73	1.2	.84	15	9.0	117	40	13	14	37	6.1	5.4
3	.36	1.3	.95	14	9.0	103	34	14	12	27	6.1	6.1
4	.32	1.4	1.2	283	350	84	29	12	11	23	9.1	6.8
5	.32	1.3	1.2	216	543	73	26	12	10	19	10	9.1
6	.28	1.2	.95	70	178	209	27	343	9.6	18	8.1	14
7	.24	1.2	.62	48	80	366	27	389	127	15	6.5	31
8	.28	1.2	.73	36	43	211	24	607	43	13	6.1	37
9	.28	1.2	.62	30	52	131	22	269	19	49	5.4	21
10	.32	1.1	.73	24	43	131	20	178	14	73	4.4	13
11	.32	.84	1.1	20	32	160	19	129	11	63	4.1	27
12	.32	.95	27	18	91	245	19	103	10	51	4.4	41
13	.51	.95	30	20	199	263	20	88	10	31	3.8	21
14	.84	1.2	19	137	115	189	22	69	9.1	21	3.3	15
15	.95	1.3	14	111	64	256	19	55	8.6	17	3.3	12
16	.84	1.3	14	58	38	215	19	50	8.1	15	2.8	8.6
17	.95	1.2	36	30	507	142	19	47	6.8	11	2.5	6.5
18	1.2	1.2	31	22	432	110	19	38	6.5	9.6	2.5	6.1
19	.95	1.1	24	19	334	112	17	32	5.8	9.6	2.3	5.4
20	1.4	2.1	19	18	410	101	16	29	6.1	8.6	2.3	19
21	1.9	2.5	20	17	241	83	17	25	9.6	7.2	2.5	67
22	1.9	2.9	216	16	1,830	78	19	21	7.7	6.1	2.3	38
23	1.3	1.7	240	15	918	70	17	20	6.5	5.8	2.1	23
24	1.3	1.2	150	14	326	60	17	19	5.8	58	1.8	16
25	1.2	1.0	70	14	221	51	16	41	5.1	54	1.8	12
26	.95	.90	35	13	238	50	13	36	1,370	24	2.3	13
27	.73	1.1	28	13	265	45	12	24	471	71	2.1	17
28	.51	1.3	24	12	178	43	14	20	211	13	13	17
29	.62	1.1	22	12	-----	41	12	18	112	13	10	14
30	1.3	.95	20	11	-----	35	13	17	72	9.1	6.1	11
31	1.1	-----	18	10	-----	32	-----	14	-----	8.1	4.4	-----
TOTAL	24.84	38.84	1,066.89	1,352	7,755.4	3,940	620	2,744	2,625.3	781.1	148.3	536.5
MEAN	.80	1.29	34.4	43.6	277	127	20.7	88.5	87.5	25.2	4.78	17.9
MAX	1.9	2.9	240	283	1,830	366	40	607	1,370	73	13	67
MIN	.24	.84	.62	10	9.0	32	12	12	5.1	5.8	1.8	3.5
CFSM	.01	.02	.44	.56	3.56	1.63	.27	1.14	1.12	.32	.06	.23
IN.	.01	.02	.51	.65	3.71	1.88	.30	1.31	1.26	.37	.07	.26
CAL YR 1970	TOTAL 23,028.64	MEAN 63.6	MAX 2,010	MIN .16	CFSM .82	IN 11.10						
WTR YR 1971	TOTAL 21,633.17	MEAN 59.3	MAX 1,830	MIN .24	CFSM .76	IN 10.34						

PEAK DISCHARGE (BASE, 1,000 CFS REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-4	1600	8.80	1,100	5-7	2230	9.76	1,380
2-17	1830	9.35	1,180	6-26	0700	11.33	2,160
2-22	0830	11.93	2,540				

03242300 Caesar Creek at Harveysburg, Ohio

LOCATION.—Lat 39°30'27", long 84°00'42", Warren County, on right bank at downstream side of bridge on State Highway 73, 0.2 mile north of Harveysburg, 2.3 miles downstream from Turkey Run, and 3.1 miles upstream from Jonahs Run.

DRAINAGE AREA.—209 sq mi.

PERIOD OF RECORD.—October 1960 to current year.

GAGE.—Water-stage recorder. Datum of gage is 781.83 ft above mean sea level. June 19 to Oct. 10, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.—11 years, 188 cfs (12.22 inches per year).

EXTREMES.—Current year: Maximum discharge, 5,650 cfs Feb. 22 (gage height, 10.55 ft); minimum, 5.0 cfs Oct. 11.
Period of record: Maximum discharge 24,000 cfs May 24, 1968 (gage height 18.70 ft), from rating curve extended above 5,200 cfs on basis of drainage area ratio comparisons with three nearby stations; no flow all or part of each day Sept. 9-18, Oct. 17, 18, 1964.
Flood of Jan. 21, 1959 reached a stage of 20.5 ft, from floodmark (discharge, 26,000 cfs), from rating curve extended above 12,000 cfs.

REMARKS.—Records good except those for the winter period, which are fair. Intermittent pumpage, upstream from gage, for local irrigation. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	11	17	52	28	366	88	32	44	148	19	8.8
2	7.6	11	16	48	27	316	109	32	42	111	16	9.4
3	7.4	12	15	52	26	276	94	41	39	84	23	14
4	6.8	12	16	738	200	222	84	38	35	69	44	21
5	6.3	13	15	580	1,400	199	76	34	31	58	55	18
6	6.1	12	13	170	260	666	74	1,010	29	51	41	20
7	6.0	12	13	120	120	1,230	74	1,080	367	45	26	56
8	5.8	12	12	96	80	590	70	1,950	108	37	18	64
9	5.4	12	12	82	70	348	65	782	59	129	15	45
10	5.2	12	11	68	64	348	59	435	45	198	13	29
11	5.0	11	44	58	84	470	55	316	38	194	12	73
12	5.1	11	150	52	200	650	55	280	32	148	11	80
13	6.5	11	110	72	400	760	55	184	30	88	10	49
14	7.4	12	88	280	240	535	63	151	31	63	10	31
15	9.7	13	72	160	160	800	55	122	28	48	9.4	24
16	9.6	67	74	94	113	640	51	113	24	41	9.0	18
17	8.3	112	194	78	1,450	366	51	111	21	32	8.6	14
18	7.6	100	148	64	1,390	264	50	98	18	25	8.2	12
19	7.6	84	117	52	980	264	45	88	16	25	8.0	12
20	8.3	82	90	46	1,380	244	42	84	15	23	7.6	24
21	9.8	77	92	44	615	199	44	76	24	18	7.6	94
22	11	62	602	43	4,450	187	47	67	23	16	7.6	80
23	12	42	615	42	2,030	167	42	63	17	14	7.8	48
24	11	20	415	41	842	148	41	59	14	85	7.2	34
25	11	23	210	40	550	132	39	100	12	141	7.0	24
26	10	25	140	38	615	125	35	88	2,870	63	4.4	27
27	9.9	24	110	36	782	115	32	72	1,310	67	15	29
28	9.6	22	90	34	505	111	38	61	520	39	12	32
29	9.4	20	76	32	-----	104	39	56	272	41	17	27
30	10	19	66	30	-----	92	34	51	184	34	12	21
31	11	-----	58	29	-----	86	-----	48	-----	25	9.7	-----
TOTAL	254.5	956	3,701	3,371	19,061	11,020	1,706	7,722	6,298	2,158	476.1	1,038.2
MEAN	8.21	31.9	119	109	681	355	56.9	249	210	69.6	15.4	34.6
MAX	12	112	615	738	4,450	1,230	109	1,950	2,870	198	55	94
MIN	5.0	11	11	29	26	86	32	32	12	14	7.0	8.8
CFSM	.04	.15	.57	.52	3.26	1.70	.27	1.19	1.00	.33	.07	.17
IN.	.05	.17	.66	.60	3.39	1.96	.30	1.37	1.12	.38	.08	.18

CAL YR 1970 TOTAL 62,050.2 MEAN 170 MAX 5,410 MIN 4.3 CFSM .81 IN 11.04
WTR YR 1971 TOTAL 57,761.8 MEAN 158 MAX 4,450 MIN 5.0 CFSM .76 IN 10.28

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-17	1930	8.23	3,640	5-7	2330	7.92	3,400
2-22	1000	10.55	5,650	6-26	1900	8.97	4,240

Note.—No gage height record Jan. 5 to Feb. 15.

03242350 Caesar Creek near Wellman, Ohio

LOCATION.--Lat 39°28'57", long 84°03'52", Warren County, on downstream side of bridge on O'Neill Road, 0.5 mile downstream from Flat Fork, 1.6 miles west of Wellman, 2.8 miles upstream from mouth, and 3.2 miles southwest of Harveysburg,

Drainage Area.--239 sq mi.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 730.03 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 212 cfs (12.05 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,900 cfs Feb. 22 (gage height, 14.07 ft); minimum 1.1 cfs Oct. 10, 11.

Period of record: Maximum discharge 29,000 cfs May 24, 1968 (gage height, 21.7 ft), from rating curve extended above 4,700 cfs on the basis of slope-conveyance study; minimum 0.50 cfs Aug. 24, 1965 (gage height, 3.88 ft).

Flood of Jan. 21, 1959 reached a stage of 24.03 ft, from information by Ohio Division of Water (discharge, about 29,000 cfs, from flood study).

REMARKS.--Records fair except those for the winter period, which are poor. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	10	28	50	33	431	93	33	34	143	26	11
2	6.2	13	26	47	32	355	157	33	33	102	20	18
3	5.6	16	25	45	32	300	110	41	31	77	24	26
4	4.6	16	23	85.4	260	245	92	40	28	59	42	34
5	3.5	15	21	574	1,700	231	80	38	27	50	52	25
6	3.2	14	19	190	1,160	761	84	1,110	26	42	41	20
7	2.5	13	17	143	170	1,680	77	906	224	35	30	57
8	2.2	12	15	110	90	1,180	72	2,010	112	31	22	56
9	2.0	12	14	94	80	470	69	863	55	28	20	33
10	1.3	12	13	80	74	539	62	458	36	62	19	24
11	1.3	11	46	70	80	756	55	360	29	195	16	63
12	1.4	11	203	60	400	860	53	298	30	132	13	64
13	4.0	11	179	80	640	828	55	207	25	79	12	49
14	6.2	12	90	512	596	557	59	137	26	50	12	36
15	10	15	77	300	500	848	57	92	23	36	11	24
16	9.2	21	97	120	318	616	52	95	18	31	11	21
17	7.6	52	300	92	1,460	401	53	126	15	28	10	17
18	6.2	74	201	74	1,950	305	50	92	14	24	9.2	14
19	5.2	85	225	60	970	243	46	78	13	19	8.8	13
20	7.2	99	268	54	1,210	243	42	72	12	19	8.4	18
21	10	97	268	52	684	239	42	59	13	19	7.2	57
22	12	72	1,130	50	3,960	215	47	58	13	17	6.9	53
23	12	44	1,020	49	2,590	181	44	52	12	17	6.9	39
24	11	30	792	48	876	165	39	47	11	51	6.2	31
25	10	34	350	46	564	152	37	95	9.2	159	6.2	26
26	9.2	39	130	44	676	146	36	78	2,900	73	23	26
27	8.4	38	90	42	940	131	31	56	1,400	64	19	28
28	7.6	37	75	40	624	128	46	52	491	45	19	29
29	7.6	34	65	38	-----	110	38	45	285	39	19	24
30	10	31	60	36	-----	103	35	41	185	48	15	21
31	10	-----	55	34	-----	99	-----	37	-----	36	11	-----
TOTAL	204.1	980	5,922	4,089	22,669	13,518	1,813	7,709	6,130.2	1,810	546.8	957
MEAN	6.58	32.7	191	132	810	436	60.4	249	204	58.4	17.6	31.9
MAX	12	99	1,130	858	3,960	1,680	157	2,010	2,900	195	52	64
MIN	1.3	10	13	34	32	99	31	33	9.2	17	6.2	11
CFSM	.03	.14	.80	.55	3.39	1.82	.25	1.04	.85	.24	.07	.13
IN.	.03	.15	.92	.64	3.53	2.10	.28	1.20	.95	.28	.09	.15
CAL YR 1970	TOTAL 70,276.0	MEAN 193	MAX 5,580	MIN 1.3	CFSM .81	IN 10.94						
WTR YR 1971	TOTAL 66,348.1	MEAN 182	MAX 3,960	MIN 1.3	CFSM .76	IN 10.33						

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	Unknown	Unknown	About 3,000	2-22	1500	14.07	5,900
2-17	2100	12.30	3,740	6-26	Unknown	Unknown	About 4,000

LITTLE MIAMI RIVER BASIN

03244000 Todd Fork near Roachester, Ohio

LOCATION.--Lat 39°20'07", long 84°05'12", Warren County, on right bank at downstream side of bridge on State Highway 123, 0.3 mile downstream from Lick Run, 1.6 miles southeast of Roachester, and 4 miles upstream from mouth.

DRAINAGE AREA.--219 sq mi.

PERIOD OF RECORD.--September 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 679.40 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 208 cfs.

EXTREMES.--Current year: Maximum discharge, 11,100 cfs Feb. 22 (gage height, 16.24 ft); minimum 3.2 cfs Oct. 9, 10-13.

Period of record: Maximum discharge, 25,500 cfs Jan. 21, 1959 (gage height, 19.50 ft), from rating curve extended above 12,000 cfs on basis of contracted-opening measurement of peak flow; no flow for all or part of each day Sept. 1, 2, 1953, Sept. 6-17, 1964.

REMARKS.--Records fair prior to Feb. 21, good thereafter. Some regulation by Cowan Lake on Cowan Creek, 17.2 miles upstream, (capacity, 12,000 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1435: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	11	72	58	28	421	62	25	32	85	13	15
2	16	11	71	48	27	412	113	25	29	63	13	15
3	12	12	70	44	26	445	91	29	27	46	13	15
4	9.0	16	69	1,430	989	418	73	31	25	35	12	20
5	7.3	16	45	646	1,710	397	64	27	22	27	12	22
6	6.3	16	21	220	400	892	60	457	20	24	12	20
7	5.3	16	18	140	240	1,340	58	500	18	20	13	24
8	4.8	16	16	110	140	556	55	1,170	60	18	12	30
9	3.8	16	14	98	100	358	52	340	38	16	12	27
10	3.2	16	14	86	88	320	47	195	26	16	12	27
11	3.2	16	14	76	80	790	44	137	20	35	11	27
12	3.2	16	44	68	110	795	42	117	18	62	10	44
13	3.2	16	116	60	1,190	451	43	103	16	43	10	45
14	3.6	81	73	714	247	330	48	92	15	25	9.2	46
15	3.8	280	55	409	170	815	46	76	98	18	8.5	45
16	3.8	151	72	190	116	552	40	100	37	14	8.1	44
17	3.8	142	338	130	1,490	376	39	283	22	11	7.3	43
18	3.8	136	134	100	1,140	320	39	119	16	10	6.6	41
19	3.6	134	92	74	805	313	36	82	13	9.6	6.2	38
20	3.5	211	73	60	1,570	255	34	71	11	9.6	5.7	36
21	3.7	190	89	52	679	218	33	60	10	11	5.4	45
22	4.5	153	1,430	56	7,360	189	38	52	77	11	4.8	46
23	4.6	142	741	56	2,030	118	36	46	46	11	4.6	45
24	4.7	133	499	52	750	102	32	43	22	11	4.3	45
25	4.9	128	266	44	532	92	30	112	15	13	4.0	45
26	9.1	77	170	40	655	87	28	97	2,150	14	4.3	44
27	13	74	140	36	805	83	26	62	958	14	8.9	44
28	11	73	120	34	500	80	27	50	330	14	16	44
29	10	72	130	32	-----	76	27	45	183	14	15	44
30	10	73	90	30	-----	68	26	39	115	14	15	44
31	9.9	-----	70	29	-----	57	-----	35	-----	14	15	-----
TOTAL	210.6	2,444	5,166	5,222	23,977	11,726	1,389	4,620	4,469	728.2	303.9	1,070
MEAN	6.79	81.5	167	168	856	378	46.3	149	149	23.5	9.80	35.7
MAX	22	280	1,430	1,430	7,360	1,340	113	1,170	2,150	85	16	46
MIN	3.2	11	14	29	26	57	26	25	10	9.6	4.0	15
CAL YR 1970	TOTAL 68,831.4			MEAN 189	MAX 8,190	MIN 1.4						
WTR YR 1971	TOTAL 61,325.7			MEAN 168	MAX 7,360	MIN 3.2						

PEAK DISCHARGE (BASE, 4,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1000	16.24	11,100	6-26	1230	12.58	5,190

LITTLE MIAMI RIVER BASIN

133

03245500 Little Miami River at Milford, Ohio

LOCATION.--Lat 39°10'17", long 84°17'53", Clermont County, on right bank 500 ft downstream from Wooster Pike Bridge on U.S. Highway 50 in Milford, 1.2 miles upstream from East Fork, and 6.4 miles downstream from North Branch Creek.

DRAINAGE AREA.--1,203 sq mi.

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), March 1925 to September 1936, October 1936 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Miamiville" 1915-20.

GAUGE.--Water-stage recorder. Datum of gage is 499.35 ft above mean sea level, adjustment of 1912. June 22, 1915, to May 14, 1920, nonrecording gage at site 4 miles upstream at different datum. Mar. 11, 1925, to Aug. 16, 1928, nonrecording gage at bridge 500 ft upstream at datum 0.72 ft higher.

AVERAGE DISCHARGE.--46 years, (1915-17, 1925-36, 1938-71), 1,185 cfs (13.38 inches per year).

EXTREMES.--Current year: Maximum discharge, 36,300 cfs Feb. 22 (gage height, 13.78 ft); minimum, 85 cfs Jan. 27, result of freezeup. Period of record: Maximum discharge, 84,100 cfs Jan. 22, 1959 (gage height, 22.30 ft), from rating curve extended above 60,000 cfs on basis of slope-area measurement of peak flow; minimum observed, 27 cfs Sept. 18, 1954; Flood in March 1913 reached a stage of 25.5 ft, present datum, from information by Corps of Engineers.

REMARKS.--Records good. Some regulation since 1948 by Cowan Lake (capacity, 12,000 acre-ft) 45 miles upstream on Cowan Creek, tributary to Todd Fork. Annual figures of runoff are considered to be within 10 percent of natural yield. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	211	283	420	150	2,220	595	333	307	844	211	128
2	161	211	278	390	150	1,940	948	338	297	704	192	872
3	142	273	264	390	140	1,860	924	328	292	601	199	900
4	130	348	254	4,870	950	1,690	711	386	287	486	525	1,130
5	122	259	278	3,170	7,500	1,560	619	359	273	408	397	658
6	116	228	250	1,450	3,630	2,790	589	2,450	254	359	392	491
7	111	211	207	740	1,400	6,540	554	4,060	851	323	307	964
8	103	192	192	640	800	3,460	531	8,240	972	287	245	613
9	103	174	181	600	560	2,260	502	3,810	504	259	207	425
10	114	171	178	560	600	1,960	469	2,230	370	601	181	318
11	103	167	178	540	640	3,660	447	1,560	307	711	171	370
12	108	167	679	520	860	3,900	436	1,280	273	697	171	2,190
13	174	164	1,110	500	4,630	3,010	425	1,110	254	531	164	725
14	232	185	709	2,530	1,610	2,680	458	908	245	386	136	436
15	241	474	525	1,950	1,200	3,580	474	767	237	307	128	333
16	224	559	717	1,080	897	3,950	430	671	318	259	119	269
17	174	408	2,810	800	3,800	2,470	408	1,950	241	228	114	220
18	155	436	1,250	600	7,740	1,880	397	980	207	224	111	192
19	142	419	823	480	4,430	1,700	386	664	192	228	108	171
20	220	877	656	400	6,920	1,750	365	577	185	196	105	537
21	333	955	666	360	3,770	1,490	348	514	185	189	114	1,060
22	312	643	5,530	400	27,400	1,300	343	441	254	174	122	658
23	259	514	3,660	400	12,200	1,150	354	403	292	164	105	458
24	211	441	2,520	380	5,250	1,000	333	386	216	203	136	343
25	192	392	1,400	350	3,080	893	318	619	181	474	139	278
26	174	365	940	270	2,850	837	307	795	1,810	571	211	1,550
27	158	307	700	220	4,030	788	302	537	6,800	452	211	664
28	145	297	600	200	3,000	739	302	436	3,820	348	307	537
29	145	283	540	180	-----	704	381	381	1,660	302	245	419
30	164	278	500	170	-----	664	359	359	1,100	307	181	333
31	199	-----	460	160	-----	613	-----	328	-----	245	152	-----
TOTAL	5,352	10,609	29,338	25,720	110,187	65,038	14,015	38,200	23,188	12,068	6,106	18,132
MEAN	173	354	946	830	3,935	2,098	467	1,232	773	389	197	604
MAX	333	955	5,530	4,870	27,400	6,540	948	8,240	6,800	844	525	2,080
MIN	103	164	178	160	140	613	302	328	181	164	105	128
CFSM	.14	.29	.79	.69	3.27	1.74	.39	1.02	.64	.32	.16	.50
IN.	.17	.33	.91	.80	3.41	2.01	.43	1.18	.72	.37	.19	.56

CAL YR 1970 TOTAL 395,503 MEAN 1,084 MAX 28,100 MIN 92 CFSM .90 IN 12.23
WTR YR 1971 TOTAL 357,953 MEAN 981 MAX 27,400 MIN 103 CFSM .82 IN 11.07

PEAK DISCHARGE (BASE, 15,000 CFS).--Feb. 22 (1000) 36,300 cfs (13.78 ft).

LITTLE MIAMI RIVER BASIN

03246200 East Fork Little Miami River near Marathon, Ohio

LOCATION.--Lat 39°06'52", long 84°01'29", Clermont County, on right bank at downstream side of bridge on Blue Sky Park Road, 500 ft upstream from Fivemile Creek, 1 mile downstream from Sixmile Creek, and 2.3 miles southwest of Marathon.

DRAINAGE AREA.--195 sq mi.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 842.32 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 9,690 cfs Feb. 23 (gage height 17.35 ft); minimum daily discharge 2.1 cfs Oct. 12.
Period of record: Maximum discharge 11,400 cfs Apr. 2, 1970 (gage height 18.57 ft in gage well, about 19.8 ft outside); minimum, 0.50 cfs Oct. 15, 16, 17, 1969 minimum gage height, 3.88 Oct. 15, 1969.

REMARKS.--Records good except those for winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio 1970: 1969(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	24	20	35	15	172	44	16	44	78	40	37
2	13	77	21	31	14	140	55	16	40	58	30	874
3	9.0	128	19	29	13	127	65	15	37	49	27	1,170
4	6.0	102	17	1,190	577	113	53	14	33	44	290	1,520
5	4.4	77	16	814	1,930	105	43	15	30	33	517	406
6	3.3	60	15	222	388	420	38	47	30	28	213	160
7	2.6	48	13	100	156	1,830	35	242	354	24	114	502
8	2.5	41	11	76	90	446	33	640	239	21	67	222
9	2.3	35	9.6	60	81	261	31	295	118	19	44	105
10	2.5	32	8.5	52	74	334	28	144	65	70	33	55
11	2.2	30	9.0	46	58	1,100	26	89	44	409	27	43
12	2.1	28	385	44	162	1,420	24	67	35	423	25	700
13	4.8	28	361	44	988	589	22	74	30	142	24	1,320
14	17	38	150	1,200	571	349	23	84	32	70	20	285
15	52	178	86	60	391	726	24	65	36	41	16	144
16	35	119	132	220	212	595	23	49	35	30	14	79
17	26	72	619	120	928	280	21	2,560	29	24	12	64
18	20	52	304	86	1,720	200	21	357	22	55	11	48
19	14	42	146	74	766	209	19	172	21	140	10	37
20	21	176	98	64	1,160	308	18	113	19	86	9.6	36
21	206	182	126	56	562	232	16	87	48	56	11	189
22	110	107	1,800	50	7,740	168	16	70	37	35	43	116
23	65	67	1,240	46	5,180	144	16	59	62	25	21	62
24	41	47	724	42	496	114	16	52	73	30	12	40
25	28	36	236	40	308	90	16	261	40	31	25	31
26	22	31	120	34	365	82	13	290	810	35	367	1,210
27	16	30	84	24	707	76	13	123	890	134	726	526
28	14	29	66	20	308	68	14	84	194	123	313	207
29	13	17	56	18	-----	64	14	67	125	166	134	131
30	29	16	46	17	-----	56	15	58	107	118	76	81
31	30	-----	40	16	-----	44	-----	50	-----	65	49	-----
TOTAL	835.7	1,949	6,978.1	5,514	25,960	10,862	795	6,275	3,679	2,662	3,320.6	10,400
MEAN	27.0	65.0	225	178	927	350	26.5	202	123	85.9	107	347
MAX	206	182	1,800	1,210	7,740	1,830	65	2,560	890	423	726	1,520
MIN	2.1	16	8.5	16	13	44	13	14	19	19	9.6	31
CFSM	.14	.33	1.15	.91	4.75	1.79	.14	1.04	.63	.44	.55	1.78
IN.	.16	.37	1.33	1.05	4.95	2.07	.15	1.20	.70	.51	.63	1.98

CAL YR 1970 TOTAL 65,026.8 MEAN 178 MAX 9,520 MIN 1.4 CFSM .91 IN 12.41
WTR YR 1971 TOTAL 79,230.4 MEAN 217 MAX 7,740 MIN 2.1 CFSM 1.11 IN 15.11

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	1530	11.51	2,510	5-17	0630	13.41	4,910
2-5	0330	12.11	3,030	6-26	2330	11.47	3,260
2-18	0300	12.44	3,360	9-2	1530	10.91	2,810
2-23	0030	17.35	9,690	9-3	1930	10.77	2,700
3-7	0600	11.03	2,900	9-13	0130	10.74	2,670
3-12	0330	10.14	2,240				

03246500 East Fork Little Miami River at Williamsburg, Ohio

LOCATION.--Lat 39°03'09", long 84°03'02", Clermont County, on right bank at downstream side of Main Street Bridge in Williamsburg, 1.1 miles upstream from Todd Run, and 2.4 miles downstream from Crane Run.

DRAINAGE AREA.--237 sq mi.

PERIOD OF RECORD.--March 1949 to September 1953, July 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 764.09 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 253 cfs (14.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 11,800 cfs Feb. 22 (gage height, 11.43 ft); minimum, 1.6 cfs Oct. 11, 12.
Period of record: Maximum discharge, 19,800 cfs Mar. 10, 1964 (gage height, 15.23 ft), from rating curve extended above 14,000 cfs on basis of contracted-opening measurement of peak flow; no flow for many days in 1951, 1953, 1963-65.
Flood in January 1959 reached a stage of 12.2 ft, from information by local resident (discharge, 14,000 cfs).

REMARKS.--Records good except winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	38	30	48	23	206	48	17	28	54	27	26
2	23	61	34	46	21	165	54	20	26	37	17	1,490
3	16	177	34	56	27	151	59	19	24	26	13	2,200
4	10	114	32	2,020	160	140	57	17	22	23	274	2,880
5	7.1	90	29	1,470	2,700	129	47	18	20	18	624	690
6	5.2	74	29	302	700	445	41	38	17	13	213	225
7	4.3	61	26	150	250	2,270	38	162	330	8.8	89	491
8	3.5	53	23	110	130	549	36	714	233	6.8	48	283
9	2.9	47	21	90	100	258	35	302	77	5.4	29	123
10	2.8	43	20	80	94	312	32	117	54	60	20	73
11	2.0	41	22	70	110	1,350	38	73	34	298	15	62
12	2.9	39	455	64	160	1,810	28	57	25	430	11	536
13	5.4	38	412	82	1,360	692	27	69	20	122	9.4	1,750
14	6.3	44	154	1,600	625	357	27	70	17	52	8.8	342
15	39	212	85	1,100	310	776	27	59	20	26	6.8	153
16	55	147	111	360	182	856	26	45	21	15	5.2	94
17	34	90	824	170	1,170	278	25	2,440	19	9.5	3.9	88
18	28	67	356	110	2,750	180	23	429	14	13	3.3	62
19	23	56	140	84	1,090	177	21	137	9.7	57	2.7	48
20	24	215	91	68	1,890	274	20	81	7.9	61	2.4	43
21	208	235	102	58	796	212	20	60	9.1	33	2.8	136
22	144	126	2,210	52	9,170	147	17	47	31	20	50	140
23	85	83	2,310	48	6,410	124	17	39	18	13	48	77
24	55	63	1,070	46	645	102	17	35	42	19	13	52
25	39	51	314	46	353	85	17	145	33	21	145	42
26	31	46	150	44	361	77	16	282	497	19	517	1,230
27	26	44	100	38	856	73	14	93	1,440	72	818	855
28	21	43	80	34	385	66	14	59	165	73	389	238
29	20	38	66	30	-----	63	15	45	87	85	116	143
30	33	27	58	27	-----	59	15	37	60	89	62	87
31	56	-----	52	25	-----	51	-----	33	-----	48	37	-----
TOTAL	1,046.4	2,463	9,440	8,528	32,828	12,434	863	5,759	3,400.7	1,827.5	3,620.3	14,639
MEAN	33.8	82.1	305	275	1,172	401	28.8	186	113	59.0	117	488
MAX	208	235	2,310	2,020	9,170	2,270	59	2,440	1,440	430	818	2,880
MIN	2.0	27	20	25	21	51	14	17	7.9	5.4	2.4	26
CFSM	.14	.35	1.29	1.16	4.95	1.69	.12	.78	.48	.25	.49	2.06
IN.	.16	.39	1.48	1.34	5.15	1.95	.14	.90	.53	.29	.57	2.30

CAL YR 1970 TOTAL 91,246.99 MEAN 250 MAX 12,600 MIN .89 CFSM 1.05 IN 14.32
WTR YR 1971 TOTAL 96,848.90 MEAN 265 MAX 9,170 MIN 2.0 CFSM 1.12 IN 15.20

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	1000	11.43	11,800	9-3	2130	8.31	5,670
5-17	0930	8.47	5,910				

03247050 East Fork Little Miami River near Batavia, Ohio

LOCATION.--Lat 39°03'30", long 84°10'32", Clermont County, on right bank on Elk Lick Road, 230 ft upstream from unnamed right bank tributary, 1,400 ft upstream from Lucy Run, and 1.3 miles south of Batavia.

DRAINAGE AREA.--352 sq mi, includes that of unnamed tributary.

PERIOD OF RECORD.--July 1905 to current year.

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft above mean sea level. Prior to July 17, 1966, nonrecording gage 1,100 ft downstream at same datum.

AVERAGE DISCHARGE.--6 years, 332 cfs (12.61 inches per year).

EXTREMES.--Current year: Maximum discharge, 21,300 cfs Feb. 22 (gage height, 18.36 ft); minimum, 1.5 cfs Aug. 21, 22.

Period of records: Maximum discharge, 28,700 cfs Apr. 2, 1970 (gage height 20.31 ft); minimum, 0.14 cfs Sept. 23, 27, 1967.

Flood of March 1964 reached a stage of 21.46 ft, from information by local resident (discharge, about 32,000 cfs, from flood study).

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WRD Ohio 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	88	44	64	30	290	79	21	44	77	56	34
2	46	101	46	60	29	215	110	23	40	71	32	690
3	33	313	48	56	28	191	113	29	35	49	21	2,680
4	24	186	49	2,600	220	175	103	25	31	29	520	6,240
5	18	146	47	2,100	4,020	168	88	22	25	22	864	1,580
6	15	117	43	564	1,070	544	77	51	22	21	466	484
7	12	92	40	250	382	2,940	71	233	140	12	199	690
8	10	77	37	170	200	784	65	840	538	8,7	103	526
9	9.3	68	34	140	150	382	62	514	215	7,0	58	238
10	8.9	61	31	120	130	578	60	211	116	6,0	34	134
11	8.0	57	30	100	130	2,060	53	125	69	280	23	103
12	7.5	54	432	90	250	2,110	51	98	48	508	14	154
13	13	52	680	110	2,090	824	49	233	34	328	8,7	1,710
14	22	55	272	2,160	1,210	490	49	199	25	134	6,0	526
15	27	235	145	1,680	550	832	44	113	22	67	4,8	238
16	44	250	148	526	346	1,050	43	90	24	35	4,4	140
17	75	149	1,220	280	1,680	418	43	1,650	25	19	3,7	90
18	52	101	514	180	3,590	260	41	606	19	12	2,6	71
19	39	81	244	140	1,430	251	38	215	15	15	1,8	63
20	42	273	151	100	2,510	358	35	128	11	71	1,6	55
21	143	414	122	84	1,100	328	32	93	9,3	83	1,6	51
22	298	208	3,050	70	13,600	233	32	75	7,5	41	4,4	191
23	169	133	5,140	66	7,420	179	29	63	11	28	6,9	122
24	110	92	1,580	66	888	147	26	55	23	43	62	75
25	78	69	564	66	490	125	25	187	23	53	24	51
26	60	64	290	60	406	108	25	334	41	43	936	564
27	49	60	199	54	976	98	25	172	1,340	28	753	1,200
28	41	58	140	46	578	93	24	100	340	88	697	382
29	37	56	110	40	-----	85	23	75	172	90	238	211
30	44	52	80	36	-----	81	21	62	105	103	108	137
31	96	-----	70	33	-----	75	-----	53	-----	108	60	-----
TOTAL	1,698.7	3,762	15,520	12,111	45,503	16,472	1,536	6,695	3,569.8	2,479.7	5,376.6	19,430
MEAN	54.8	125	501	391	1,625	531	51.2	216	119	80.0	173	648
MAX	298	414	5,140	2,600	13,600	2,940	113	1,650	1,340	508	936	6,240
MIN	7.5	52	30	33	28	75	21	21	7.5	6.0	1.6	34
CFSM	.16	.36	1.42	1.11	4.62	1.51	.15	.61	.34	.23	.49	1.84
IN.	.18	.40	1.64	1.28	4.81	1.74	.16	.71	.38	.26	.57	2.05

CAL YR 1970 TOTAL 136,375.5 MEAN 374 MAX 17,700 MIN 2.4 CFSM 1.06 IN 14.41
WTR YR 1971 TOTAL 134,153.8 MEAN 368 MAX 13,600 MIN 1.6 CFSM 1.05 IN 14.18

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-23	1000	13.76	7,920	9-4	1530	14.76	10,300
2-22	1100	10.36	21,300				

03247400 Shaylor Run near Perintown, Ohio

LOCATION.—Lat 39°06'46", long 84°13'24", Clermont County, on left bank 0.7 mile upstream from Norfolk and Western railroad bridge, 1.9 miles southeast of Perintown, and 2.2 miles above mouth.

DRAINAGE AREA.—11.8 sq mi.

PERIOD OF RECORD.—August 1968 to current year.

GAGE.—Water-stage recorder and V-notch weir. Altitude of gage is 575 ft (from topographic map).

EXTREMES.—Current year: Maximum discharge 575 cfs Feb. 22 (gage height 4.35 ft), from rating curve extended above 240 cfs on basis of slope-area measurement at gage height 6.6 ft; minimum 0.51 cfs Oct. 9.

Period of record: Maximum discharge 2,400 cfs Apr. 2, 1970 (gage height 7.40 ft), from rating curve extended above 240 cfs on basis of slope-area measurement at gage height 6.6 ft; minimum daily discharge 0.36 cfs Sept. 22, 1969.

REMARKS.—Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.—WUD Ohio 1970: 1968, 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	2.7	2.3	3.0	1.9	13	5.4	1.8	1.9	1.0	1.1	1.2
2	.87	3.8	2.2	2.9	1.8	12	15	2.0	1.8	.87	.95	25
3	.81	5.8	2.2	3.2	1.8	10	9.5	2.2	1.8	1.0	1.2	73
4	.81	3.5	2.3	142	56	9.5	7.8	2.0	1.6	1.3	15	76
5	.75	3.0	2.3	36	116	10	6.6	1.9	1.5	1.3	6.3	20
6	.81	2.4	2.0	13	29	63	6.3	16	1.3	1.3	2.3	41
7	.78	2.2	1.9	7.9	16	63	5.7	66	3.4	1.2	1.8	29
8	.78	2.0	1.8	5.8	10	22	4.7	67	6.7	1.2	1.5	8.7
9	.75	1.8	1.7	5.2	9.0	14	4.1	16	2.4	1.2	1.2	5.2
10	1.1	1.6	1.7	4.5	8.0	59	3.6	10	1.9	1.3	1.2	3.8
11	1.0	1.5	1.7	4.1	11	103	3.3	7.8	1.6	2.3	1.1	10
12	1.1	1.5	27	4.0	86	46	3.4	7.0	1.5	1.9	.95	35
13	5.3	1.5	12	12	101	22	4.0	11	1.6	1.5	.87	23
14	7.0	4.4	6.6	115	45	16	5.2	11	1.8	1.3	.84	9.3
15	4.2	16	4.7	34	18	74	3.8	7.0	3.3	.81	.84	5.5
16	2.2	8.0	29	14	15	31	3.7	5.4	3.2	.77	.74	10
17	1.9	5.2	76	10	114	16	3.6	10	2.3	.74	.77	5.2
18	1.5	4.1	16	7.0	65	13	2.9	6.0	2.0	.72	.71	4.0
19	1.4	3.4	9.8	5.6	72	15	2.7	3.8	1.3	2.6	.75	1.0
20	8.0	25	6.6	5.0	104	15	2.6	3.2	1.2	1.4	.74	35
21	12	11	14	4.6	37	14	2.5	3.0	1.7	1.1	.87	14
22	5.1	6.2	112	4.2	239	13	2.4	2.6	1.2	.81	3.2	6.6
23	2.9	4.3	139	3.8	48	11	2.2	2.3	.99	.74	2.0	4.0
24	2.5	2.8	29	3.4	24	8.6	2.2	2.2	1.2	2.0	1.5	2.8
25	2.2	2.5	13	3.0	18	7.8	2.0	18	1.4	1.8	12	3.0
26	2.0	2.6	8.0	2.8	31	7.4	1.9	6.2	1.4	1.9	15	57
27	1.8	2.5	6.2	2.6	42	7.0	1.9	4.1	1.0	1.4	4.7	18
28	1.6	2.4	5.0	2.4	18	7.0	2.0	3.4	.81	3.8	2.4	13
29	1.9	2.3	4.0	2.2	-----	6.3	1.9	3.0	.84	6.3	1.8	7.8
30	6.4	2.3	3.4	2.1	-----	5.4	1.8	2.6	.90	2.0	1.4	5.2
31	3.5	-----	3.2	2.0	-----	5.0	-----	2.5	-----	1.3	1.2	-----
TOTAL	83.91	138.3	546.6	467.3	1,337.5	719.0	124.7	307.0	55.54	48.86	86.93	554.3
MEAN	2.71	4.81	17.6	15.1	47.8	23.2	4.16	9.90	1.85	1.58	2.80	18.5
MAX	12	25	139	142	239	103	15	67	6.7	6.3	15	76
MIN	.75	1.5	1.7	2.0	1.8	5.0	1.8	1.8	.81	.72	.71	1.2
CFSM	.23	.39	1.49	1.28	4.05	1.97	.35	.84	.16	.13	.24	1.57
IN.	.26	.44	1.72	1.47	4.22	2.27	.39	.97	.18	.15	.27	1.75

CAL YR 1970 TOTAL 5,090.12 MEAN 13.9 MAX 667 MIN .51 CFSM 1.18 IN 16.05
 WTR YR 1971 TOTAL 4,469.94 MEAN 12.2 MAX 239 MIN .71 CFSM 1.03 IN 14.09

PEAK DISCHARGE (BASE, 250 CFS REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-23-70	0700	4.15	518	2-22	0900	4.35	575
1-4-71	0700	3.35	340	5-5	2100	3.05	280
2-17-71	1530	3.35	340	9-3	1600	3.15	300
2-19-71	2400	3.30	330				

03247500 East Fork Little Miami River at Perintown, Ohio

LOCATION.--Lat 39°08'13", long 84°14'17", Clermont County, on left bank at downstream side of highway bridge at Perintown, 0.2 miles downstream from Sugarcamp Run, and 5 miles upstream from mouth.

DRAINAGE AREA.--476 sq mi.

PERIOD OF RECORD.--May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.26 ft above mean sea level, adjustment of 1912. Prior to Feb. 6, 1940, nonrecording gage, at same site and datum.

AVERAGE DISCHARGE.--48 years (1915-17, 1925-71), 530 cfs (15.12 inches per year).

EXTREMES.--Current year: Maximum discharge, 26,400 cfs Feb. 22 (gage height, 20.45 ft); minimum, 11 cfs Oct. 12.
Period of record: Maximum discharge, 42,400 cfs Mar. 10, 1964 (gage height, 23.84 ft); minimum, 0.3 cfs July 24, 1930;
minimum gage height, -0.18 ft Oct. 3-7, 1917.

REMARKS.--Records good. Occasional regulation by Stonelick Lake on Stonelick Creek 14 miles upstream. Surface area at spillway level, 171 acres. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 673: 1938. WSP 973: 1933(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	115	67	94	43	468	138	53	72	83	79	62
2	57	107	63	90	41	348	180	55	61	74	53	1,600
3	42	484	66	90	40	318	183	59	56	63	54	3,690
4	32	299	67	3,820	611	294	159	59	54	45	650	6,600
5	25	216	65	2,850	4,780	282	145	55	47	36	990	1,500
6	20	166	62	760	1,580	835	132	121	45	29	480	800
7	17	126	54	324	532	3,850	124	620	76	29	223	1,000
8	15	101	50	221	300	1,310	116	1,500	416	23	131	620
9	14	85	46	188	203	592	111	855	240	19	85	400
10	15	74	42	158	180	855	107	342	141	23	58	260
11	13	67	40	137	180	3,080	102	205	95	81	43	200
12	13	62	620	128	593	3,020	98	159	69	372	33	280
13	30	59	1,130	145	3,010	1,290	95	246	58	333	27	1,700
14	39	66	497	3,240	1,590	760	96	321	50	147	23	560
15	44	379	260	2,370	724	1,460	93	183	50	86	20	292
16	37	435	314	713	451	1,660	90	140	53	55	18	226
17	61	242	2,390	368	2,330	670	86	2,620	46	38	18	174
18	57	158	1,020	236	4,380	412	83	1,060	42	30	16	125
19	41	120	457	180	2,160	372	78	351	39	32	15	112
20	55	489	275	140	3,750	488	76	205	36	35	14	352
21	134	819	247	110	1,730	488	72	140	38	90	14	284
22	417	352	4,270	100	18,700	360	68	110	35	58	31	211
23	215	221	6,000	100	8,820	294	65	93	34	42	37	177
24	133	144	2,250	100	1,440	252	63	83	36	50	85	124
25	92	105	771	92	760	220	61	240	40	53	72	95
26	69	95	364	84	645	200	58	428	44	64	900	1,280
27	54	87	248	74	1,480	183	57	258	1,220	63	780	1,620
28	43	81	160	64	920	170	58	145	348	62	745	569
29	38	77	130	56	-----	161	58	110	159	178	267	298
30	66	76	110	50	-----	151	55	92	110	113	143	205
31	109	-----	100	46	-----	143	-----	78	-----	113	92	-----
TOTAL	2,079	5,907	22,235	17,128	61,973	24,986	2,907	10,986	3,810	2,519	6,196	25,416
MEAN	67.1	197	717	553	2,213	806	96.9	354	127	81.3	200	847
MAX	417	819	6,000	3,820	18,700	3,850	183	2,620	1,220	372	990	6,600
MIN	13	59	40	46	40	143	55	53	34	19	14	62
CFSM	.14	.41	1.51	1.16	4.65	1.69	.20	.74	.27	.17	.42	1.78
IN.	.16	.46	1.74	1.34	4.84	1.95	.23	.86	.30	.20	.48	1.99

CAL YR 1970 TOTAL 190,938.6 MEAN 523 MAX 22,700 MIN 3.4 CFSM 1.10 IN 14.92
WTR YR 1971 TOTAL 186,142.0 MEAN 510 MAX 18,700 MIN 13 CFSM 1.07 IN 14.55

PEAK DISCHARGE (BASE, 10,000 CFS).--Feb. 22 (0930) 26,400 cfs (20.45 ft).

LITTLE MIAMI RIVER BASIN

139

03248000 Little Miami River at Plainville, Ohio

LOCATION.—Lat 39°08'13", long 84°21'11", in SE 1/4 sec. 3, FR 2T4, Hamilton County, on downstream side of bridge on Newtown Road, 0.5 mile east of Plainville, 0.7 mile northeast of Newtown, 3.5 miles downstream from East Fork, and 8.2 miles upstream from mouth.

DRAINAGE AREA.—1,713 sq mi.

PERIOD OF RECORD.—August 1914 to September 1915, August 1918 to June 1920 (gage heights and discharge measurements only), July 1965 to September 1971 (discontinued).

GAGE.—Nonrecording gage, and crest-stage gage. Datum of gage is 462.91 ft above mean sea level (City of Cincinnati bench mark). Prior to June 6, 1920, nonrecording gage at same site at altitude 475 ft (from topographic map).

AVERAGE DISCHARGE.—7 years (1915, 1966-71), 1,552 cfs (12.30 inches per year).

EXTREMES.—Current year: Maximum discharge, 50,600 cfs Feb. 22 (gage height, 28.83 ft); minimum, 122 cfs Oct. 11.

Period of record: Maximum discharge, 59,700 cfs May 24, 1968 (gage height, 30.94 ft); minimum observed, 19 cfs May 8, 9, 13, 14, 1915 (gage height, 5.1 ft, datum then in use).

Flood of Mar. 10, 1964 reached a stage of 37.5 ft, from floodmarks (discharge, about 93,000 cfs), from flood study.

REMARKS.—Records good. Some regulation by Cowan Lake (capacity, 12,000 acre-ft) on Cowan Creek, tributary to Todd Fork 50 miles upstream. Cowan Lake completed in 1948. Occasional regulation by Stonelick Lake on Stonelick Creek, 20 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	283	342	570	220	3,180	722	354	398	852	300	238
2	228	275	307	500	210	2,580	1,100	354	371	734	284	2,310
3	173	692	315	555	200	2,420	1,150	345	363	636	269	4,140
4	173	648	275	8,000	1,000	2,190	924	407	346	490	858	6,860
5	151	465	320	6,070	11,400	2,040	776	389	312	425	1,480	3,230
6	136	405	299	2,000	5,190	2,410	728	2,030	304	380	985	1,160
7	136	333	251	1,200	2,800	8,780	669	3,960	345	354	570	1,750
8	136	299	243	1,000	1,400	4,780	625	8,740	1,520	321	407	1,390
9	131	275	228	860	800	3,580	598	6,000	852	296	329	782
10	131	251	228	800	840	3,210	550	4,500	525	499	280	530
11	125	247	224	740	1,000	6,020	530	2,500	407	734	250	762
12	125	239	878	700	1,470	6,510	510	1,600	354	1,050	227	3,020
13	199	228	2,480	660	6,820	4,150	475	1,300	312	924	206	2,280
14	243	206	1,360	5,400	3,320	3,510	530	1,100	316	545	192	1,290
15	207	698	768	4,610	2,060	4,480	540	960	296	398	178	710
16	221	1,040	786	2,080	1,540	5,170	500	900	389	312	165	540
17	213	642	4,390	1,400	3,690	3,190	461	2,200	304	288	159	443
18	221	560	2,510	959	12,200	2,570	452	1,200	273	265	159	371
19	196	545	1,420	648	6,320	2,130	452	900	257	288	155	325
20	231	1,300	952	595	8,870	2,290	434	780	242	250	146	787
21	450	1,980	1,060	540	5,480	2,080	412	680	242	273	159	1,390
22	648	1,040	9,000	570	37,900	1,800	398	576	269	273	188	930
23	460	672	5,600	540	18,000	1,530	416	505	337	242	185	692
24	356	550	3,600	530	9,000	1,320	384	500	269	257	202	485
25	291	475	2,000	480	5,000	1,180	354	930	242	503	231	384
26	251	446	1,400	420	4,000	1,080	354	1,300	227	658	1,110	2,140
27	235	378	1,000	360	5,400	1,000	350	910	5,020	530	1,000	2,400
28	221	351	875	320	4,600	910	358	603	3,780	398	1,140	1,200
29	199	324	780	280	-----	858	398	480	1,710	500	576	728
30	206	342	720	260	-----	800	394	443	1,130	443	380	550
31	275	-----	650	240	-----	740	-----	407	-----	346	292	-----
TOTAL	7,299	16,189	45,261	43,867	160,730	89,488	16,544	47,854	21,713	14,464	13,063	43,817
MEAN	235	540	1,460	1,415	5,190	2,854	551	1,544	724	467	421	1,461
MAX	648	1,980	9,000	8,000	37,900	8,780	1,150	8,740	5,020	1,050	1,480	6,860
MIN	125	206	224	240	200	740	350	346	227	242	146	238
CFSM	.14	.32	.85	.83	3.35	1.67	.32	.90	.42	.27	.25	.85
IN.	.16	.35	.98	.95	3.49	1.92	.36	1.04	.47	.31	.28	.95
CAL YR 1970	TOTAL 553,583 MEAN 1,517 MAX 38,000 MIN 117 CFSM .89 IN 12.02											
WTR YR 1971	TOTAL 519,289 MEAN 1,423 MAX 37,900 MIN 125 CFSM .83 IN 11.28											

PEAK DISCHARGE (BASE, 15,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	1300	18.17	15,700	2-22	1300	28.83	50,600
2-18	0300	17.95	15,100				

03255500 Mill Creek at Reading, Ohio

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, on right bank at upstream side of Koehler Street Bridge at Reading, 1 mile upstream from West Fork Mill Creek, and 13 miles upstream from mouth.

DRAINAGE AREA.--73.0 sq mi.

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft above mean sea level, Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum discharge, 3,800 cfs Sept. 12 (gage height, 15.20 ft); minimum, 5.0 cfs Aug. 15.
Period of record: Maximum discharge, 5,780 cfs Mar. 6, 1945 (gage height, 20.00 ft present datum); no flow for days in 1940-41, 1944, 1951.

REMARKS.--Records good except those for the winter period, which are fair. Some diversion and ground water pumpage from Mill Creek and Great Miami River Basin by industrial plants of the greater Cincinnati area above station. Water-quality records for the year are published in Part 2 of this report.

REVISIONS.--WSP 1903: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	13	28	16	9.6	62	66	14	11	19	6.0	9.9
2	17	55	41	15	9.0	68	119	20	13	17	8.5	143
3	13	30	17	18	8.6	65	41	17	11	10	260	567
4	11	22	17	589	80	58	30	16	11	7.7	80	437
5	14	20	13	100	395	58	31	19	10	8.8	28	50
6	15	19	10	46	90	438	55	224	7.4	16	13	137
7	15	14	15	30	50	291	35	455	12	19	8.0	59
8	16	12	23	24	33	101	31	322	14	20	5.6	27
9	15	16	15	21	28	66	26	65	11	20	8.1	20
10	32	24	15	18	26	211	22	43	12	149	9.6	17
11	12	17	25	23	26	263	19	36	12	104	11	127
12	21	16	99	24	80	160	22	32	9.9	24	9.2	674
13	49	16	27	69	210	87	31	45	15	13	9.8	48
14	64	36	22	181	120	65	39	26	19	13	6.6	30
15	26	32	21	75	60	232	25	20	15	11	5.6	25
16	17	21	136	42	45	93	22	18	13	11	7.6	23
17	15	18	178	34	524	60	21	31	11	9.2	8.8	19
18	11	18	78	29	170	51	17	22	12	19	9.9	15
19	13	18	49	24	156	105	19	20	24	18	11	11
20	94	163	23	28	238	70	20	20	10	11	11	348
21	56	44	74	46	110	49	22	17	13	10	17	64
22	26	28	512	24	2,140	46	22	14	12	11	19	32
23	20	23	252	23	573	43	20	10	11	11	12	24
24	16	19	101	19	174	37	16	16	11	107	9.9	19
25	14	18	78	18	116	37	12	84	11	18	84	15
26	17	16	36	16	136	34	15	19	12	24	87	255
27	18	17	29	15	128	30	17	14	12	18	13	104
28	18	17	25	13	68	28	19	14	35	18	9.2	65
29	26	14	22	12	-----	32	18	9.6	20	17	6.3	35
30	22	19	19	11	-----	30	16	8.0	19	11	9.5	28
31	17	-----	17	10	-----	30	-----	7.4	-----	8.0	10	-----
TOTAL	737	795	2,017	1,613	5,803.2	3,000	868	1,678.0	409.3	772.7	794.2	3,427.9
MEAN	23.8	26.5	65.1	52.0	207	96.8	28.9	54.1	13.6	24.9	25.6	114
MAX	94	163	512	589	2,140	438	119	455	35	149	260	674
MIN	11	12	10	10	8.6	28	12	7.4	7.4	7.7	5.6	9.9

CAL YR 1970 TOTAL 25,547.4 MEAN 70.0 MAX 2,220 MIN 1.8
WTR YR 1971 TOTAL 21,915.3 MEAN 60.0 MAX 2,140 MIN 5.6

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-22	0500	14.24	3,560	9-12	0130	15.20	3,800
9-3	1600	11.28	2,230				

MILL CREEK BASIN

141

03256500 West Fork Mill Creek Reservoir near Greenhills, Ohio

LOCATION.--Lat 39°15'34", long 84°29'41", in SE 1/4 sec. 17, T.3, R.1, Hamilton County, in gate house of dam on West Fork Mill Creek, 1.2 miles east of Greenhills.

DRAINAGE AREA.--29.9 sq mi.

PERIOD OF RECORD.--April 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft above mean sea level, adjustment of 1912 (levels by Corps of Engineers); gage readings have been adjusted to elevations above mean sea level.

EXTREMES.--Current year: Maximum contents, 4,540 acre-ft Feb. 22 (elevation, 686.67 ft); minimum, 925 acre-ft Jan. 14 (elevation, 671.57 ft).

Period of record: Maximum contents, 9,680 acre-ft Jan. 22, 1959 (elevation, 698.95 ft); minimum, 729 acre-ft Feb. 26, 1964 (elevation, 670.00 ft).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; operation for flood control began Dec. 20, 1952; storage to maintain conservation pool began Apr. 19, 1953. Usable capacity 11,310 acre-ft between elevations 655.0 ft (lowest outlet) and 702.0 ft (crest of spillway) of which 1,470 acre-ft is in conservation pool. Dead storage below elevation 655.0 ft, 65 acre-ft. Figures given herein represent useable contents. Reservoir is used for flood control and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

COOPERATION.--Water-stage recorder graph and capacity table furnished by Corps of Engineers.

REVISIONS.--WSP 1908: Drainage area.

MONTHEND GAGE HEIGHT AND CONTENTS AT 2400, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

Date	Gage height (feet)	Contents (acre-ft)	Change in contents (acre-feet)
Sept. 30.....	675.10	1,490	-
Oct. 31.....	675.07	1,480	-10
Nov. 30.....	675.14	1,490	+10
Dec. 31.....	672.08	990	-500
CAL YR 1970.....	-	-	-60
Jan. 31.....	672.04	990	-0
Feb. 28.....	675.08	1,480	+490
Mar. 31.....	675.10	1,490	+10
Apr. 30.....	675.05	1,480	-10
May 31.....	675.04	1,470	-10
June 30.....	675.19	1,500	+30
July 21.....	675.09	1,480	-20
Aug. 31.....	675.08	1,480	-0
Sept. 30.....	675.10	1,490	+10
WTR YR 1971.....	-	-	0

MILL CREEK BASIN

03257500 West Fork Mill Creek at Woodlawn, Ohio

LOCATION.--Lat 39°15'14", long 84°28'13", in NE 1/4 sec. 10, R.1, T.3, Hamilton County, on left bank at upstream side of Riddle Road Bridge in Woodlawn, 0.5 mile upstream from small left bank tributary, 1.9 miles downstream from West Fork Mill Creek Dam, and 4.0 miles upstream from mouth.

DRAINAGE AREA.--32.2 sq mi.

PERIOD OF RECORD.--December 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 570.00 ft above mean sea level, adjustment of 1914 (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--18 years (1953-71), 29.4 cfs.

EXTREMES.--Current year: Maximum discharge, 1,240 cfs May 8 (gage height, 5.43 ft); no flow part of each day May 23-25.

Period of record: Maximum discharge, 2,000 cfs Apr. 4, 1956 (gage height, 6.82 ft); no flow for many days in most years.

REMARKS.--Records good except those for the winter period and those below 2.0 cfs, which are fair. Flow regulated by West Fork Mill Creek Reservoir 1.9 miles upstream beginning 1953 (see sta. 03256500).

Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	1.6	136	3.3	2.1	21	16	3.8	.80	9.4	.37	.17
2	.34	14	45	3.2	1.5	22	88	5.3	.50	6.2	.37	14
3	.38	23	74	5.0	1.0	23	21	9.0	.37	.28	33	120
4	.28	14	20	278	115	21	12	5.6	.34	.15	708	356
5	.37	5.6	10	141	280	21	11	3.5	.63	.11	88	10
6	.26	2.3	.90	20	23	46	17	154	.41	.15	18	7.9
7	.19	1.6	.71	11	12	258	23	60	.90	.17	8.6	14
8	.21	.34	.63	6.2	7.4	48	18	453	2.7	.14	4.8	4.0
9	.19	.36	.56	5.8	4.0	38	9.8	35	.50	.09	5.3	3.5
10	.69	5.7	.50	6.2	8.0	46	7.5	16	.25	.43	2.1	3.3
11	1.8	6.2	8.9	6.2	11	129	6.2	14	.21	263	2.1	103
12	2.5	2.3	87	6.8	72	100	8.2	12	.31	32	2.1	245
13	11	2.3	21	23	122	42	10	11	.56	2.9	2.3	44
14	30	13	5.0	178	56	35	24	11	6.8	3.1	3.1	21
15	22	17	5.2	19	18	143	18	11	97	2.9	2.9	11
16	8.3	15	30	12	9.8	44	8.2	8.2	23	2.5	2.9	5.0
17	.80	11	165	9.0	45	21	5.6	8.6	6.8	1.6	1.4	4.8
18	.31	8.5	43	7.8	218	20	5.6	6.8	2.5	1.6	.37	4.0
19	.34	2.5	16	7.0	63	52	7.9	5.3	10	2.3	.31	1.5
20	23	104	11	6.2	218	24	6.5	3.3	15	2.5	.25	129
21	90	40	21	5.6	56	23	5.9	.21	7.5	2.9	.90	317
22	13	22	190	5.0	230	15	4.8	.01	3.1	3.1	11	43
23	6.7	17	248	4.8	921	16	4.8	.01	3.5	2.9	19	23
24	2.9	7.8	69	4.6	664	11	4.8	.01	1.8	30	6.8	14
25	2.7	1.4	14	4.5	45	11	3.3	15	.25	101	15	9.4
26	2.9	1.6	8.2	4.4	47	13	2.5	33	.23	10	138	216
27	2.7	3.8	5.6	4.2	50	12	1.1	7.5	.25	4.0	7.9	94
28	3.3	5.6	4.0	4.1	38	9.8	5.0	2.7	.71	3.5	5.3	45
29	4.5	6.0	3.2	3.8	-----	12	5.3	2.9	.90	10	2.5	23
30	7.3	8.8	3.4	3.2	-----	6.5	3.1	2.5	2.9	10	.90	11
31	5.7	-----	3.4	2.6	-----	4.8	-----	2.5	-----	4.3	.41	-----
TOTAL	245.29	364.50	1,250.20	801.5	3,337.8	1,288.1	364.1	902.74	190.72	555.79	1,093.98	1,896.57
MEAN	7.91	12.2	40.3	25.9	119	41.6	12.1	29.1	6.36	17.9	35.3	63.2
MAX	90	104	248	278	921	258	88	453	97	263	708	356
MIN	.19	.34	.50	2.6	1.0	4.8	1.1	.01	.21	.09	.25	.17
CAL YR 1970	TOTAL 13,024.60	MEAN 35.7	MAX 993	MIN .13								
WTR YR 1971	TOTAL 12,291.29	MEAN 33.7	MAX 921	MIN .01								

MILL CREEK BASIN

143

03259000 Mill Creek at Carthage, Ohio

LOCATION.--Lat 39°12'07", long 84°28'16", in SW 1/4 sec. 1, R.1, T.3, Hamilton County, on right bank 100 ft downstream from Anthony Wayne Avenue Bridge in Carthage, 1 mile downstream from West Fork Mill Creek, and 11 miles upstream from mouth.

DRAINAGE AREA.--115 sq mi.

PERIOD OF RECORD.--November 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 512.00 ft above mean sea level, Ohio River datum. Prior to Oct. 1, 1954 at site 100 ft upstream at same datum.

EXTREMES.--Current year: Maximum discharge, 6,430 cfs Feb. 22 (gage height, 13.59 ft); minimum, 6.5 cfs Oct. 4, 18.
Period of record: Maximum discharge, 8,900 cfs Jan. 21, 1959 (gage height, 16.17 ft), from rating curve extended above 2,800 cfs on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

REMARKS.--Records good except those for the winter period, which are fair. Some inter-basin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Reservoir, 6.9 miles upstream, beginning 1953 (see sta. 03256500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	3.6	155	24	16	100	74	15	12	17	9.3	9.0
2	17	89	115	23	15	104	212	25	14	17	8.6	194
3	11	61	103	28	14	104	70	27	11	9.7	310	745
4	7.9	41	40	1,010	429	96	49	23	11	9.	756	972
5	11	29	31	285	780	95	46	20	11	10	155	74
6	14	19	10	113	136	471	76	343	11	17	27	160
7	13	14	14	50	58	637	62	516	15	20	12	90
8	14	9.3	29	40	46	171	54	742	16	19	10	30
9	14	14	19	38	41	124	41	113	13	19	9.7	20
10	41	28	16	36	38	270	31	67	13	218	10	16
11	9.3	23	41	38	42	444	29	57	13	375	11	280
12	24	17	218	40	330	288	34	51	12	60	10	1,200
13	65	15	61	120	375	153	45	67	19	12	11	97
14	104	63	32	405	146	123	70	43	29	11	10	54
15	56	59	30	116	93	399	50	34	100	9.3	9.7	37
16	32	42	190	72	82	164	37	29	47	8.6	9.3	26
17	13	32	408	52	588	103	29	42	21	8.3	9.0	20
18	7.9	30	147	42	498	92	25	32	14	20	9.0	15
19	9.7	20	89	36	273	178	29	29	34	20	10	9.0
20	140	320	43	42	577	115	30	27	32	9.3	11	501
21	151	103	116	74	204	97	29	19	22	8.6	28	420
22	47	58	840	41	3,320	81	28	14	16	7.9	30	75
23	32	49	679	36	1,710	78	26	11	13	7.9	26	49
24	17	36	180	32	1,010	68	20	17	12	156	14	34
25	13	24	90	28	176	61	16	131	11	104	140	26
26	15	20	56	26	188	59	17	58	11	34	236	605
27	15	24	44	23	184	55	21	27	11	19	20	200
28	14	25	38	21	126	47	22	17	39	25	11	120
29	30	24	34	19	-----	50	27	13	14	32	10	65
30	27	32	30	18	-----	43	19	11	11	17	9.7	44
31	20	-----	26	17	-----	37	-----	11	-----	11	9.3	-----
TOTAL	1,003.8	1,328.9	3,924	2,945	11,495	4,907	1,318	2,631	608	1,311.6	1,941.6	6,177.0
MEAN	32.4	44.3	127	95.0	411	158	43.9	84.9	20.3	42.3	62.6	206
MAX	151	320	840	1,010	3,320	637	212	742	100	375	756	1,200
MIN	7.9	8.6	10	17	14	37	16	11	11	7.9	8.6	9.0

CAL YR 1970 TOTAL 44,834.1 MEAN 123 MAX 2,980 MIN 7.9

WTR YR 1971 TOTAL 39,590.9 MEAN 108 MAX 3,320 MIN 7.9

GREAT MIAMI RIVER BASIN

03260700 Bokongshelas Creek near De Graff, Ohio

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R.14, T.2, Logan County, on right bank at downstream side of county road bridge, 2 miles downstream from Bluejacket Creek, 2.8 miles northeast of De Graff, and 4 miles upstream from mouth.

DRAINAGE AREA.--36.3 sq mi.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962, published as Buckongshelas Creek near Degraff.

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 29.5 cfs (11.04 inches per year).

EXTREMES.--Current year: Maximum discharge 502 cfs Feb. 22 (gage height, 4.94 ft) maximum gage-height 5.09 ft Feb. 4 (result of ice jam); minimum, 4.1 cfs Oct. 4.

Period of record: Maximum discharge, 1,780 cfs Jan. 21, 1959 (gage height, 6.83 ft); minimum, 2.0 cfs Sept. 29, 30, Oct. 1, 8, 1963.

REMARKS.--Records good except those for the winter period, which are fair. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 miles upstream; since storage capacity is small, daily flows are not affected appreciably. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.8	8.3	8.2	6.8	45	23	9.9	12	25	5.8	5.5
2	5.6	12	8.3	7.8	6.8	40	30	9.4	23	19	5.8	5.8
3	5.3	12	13	8.2	7.0	36	24	11	37	16	6.5	6.2
4	4.3	10	15	6.6	3.8	31	21	10	24	14	6.8	5.5
5	4.8	9.8	11	26	290	29	21	11	20	12	6.5	4.8
6	5.3	6.3	8.9	25	110	37	20	58	16	12	6.2	19
7	5.3	6.8	8.3	17	50	56	20	36	16	12	5.8	16
8	5.8	7.8	8.8	14	35	38	18	54	16	12	5.2	7.4
9	6.3	8.3	8.3	12	29	35	17	34	14	11	5.5	6.5
10	6.8	6.8	7.8	11	26	32	15	26	14	12	6.2	6.2
11	6.8	6.3	9.8	10	25	31	14	22	12	14	7.8	6.2
12	10	6.3	26	9.4	46	39	14	59	12	11	5.8	5.5
13	15	9.3	22	9.0	100	68	16	42	14	10	5.5	5.8
14	10	9.8	16	19	50	54	20	30	12	9.4	5.5	5.8
15	9.3	11	14	12	40	76	16	24	12	8.5	4.8	5.5
16	7.3	9.8	15	10	36	64	15	17	10	8.5	4.8	5.5
17	7.3	10	19	9.0	200	50	14	20	9.4	7.8	5.5	5.2
18	6.8	10	16	8.4	177	42	12	17	9.0	7.1	5.5	4.8
19	6.3	10	14	7.8	193	45	12	16	8.5	7.4	5.5	4.4
20	7.8	15	11	7.6	170	44	12	16	7.8	8.1	13	13
21	9.8	12	11	7.4	68	42	12	14	9.9	7.4	6.8	7.4
22	7.8	9.3	26	7.4	202	51	12	12	8.5	7.4	5.8	5.8
23	7.8	8.3	36	7.2	141	42	12	11	8.1	7.1	5.8	5.2
24	7.3	7.6	24	7.2	72	35	11	12	7.8	20	6.2	4.8
25	6.8	8.0	19	7.0	56	33	9.4	42	9.3	9.4	6.2	5.2
26	6.8	7.4	16	7.0	71	30	9.9	25	254	8.1	6.2	15
27	7.8	7.3	13	7.6	77	28	10	20	75	7.8	9.8	9.9
28	8.3	7.8	11	7.4	54	26	12	17	43	7.4	5.8	7.4
29	9.3	8.3	10	7.2	-----	25	11	15	32	7.8	4.8	6.8
30	12	8.8	9.2	7.0	-----	23	10	13	27	7.4	4.8	6.8
31	9.3	-----	8.6	7.0	-----	22	-----	12	-----	6.8	5.5	-----
TOTAL	236.6	284.9	444.2	386.5	2,476.6	1,249	463.3	715.3	773.3	333.4	191.7	219.2
MEAN	7.63	9.50	14.3	12.5	88.5	40.3	15.4	23.1	25.8	10.8	6.18	7.31
MAX	15	15	36	66	302	76	30	59	254	25	13	19
MIN	4.3	7.3	7.8	7.0	6.8	22	9.4	9.4	7.8	6.3	4.8	4.4
CFSM	.21	.26	.39	.34	2.44	1.11	.42	.64	.71	.30	.17	.20
IN.	.24	.29	.46	.40	2.54	1.28	.47	.73	.79	.34	.20	.22

CAL YR 1970 TOTAL 11,246.1 MEAN 30.8 MAX 609 MIN 4.1 CFSM .85 IN 11.52
WTR YR 1971 TOTAL 7,774.4 MEAN 21.3 MAX 302 MIN 4.3 CFSM .59 IN 7.97

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-4	0930	-	-	2-19	2100	4.11	322
2-4	Unknown	-	About 500	2-22	1500	4.94	502
2-17	1900	-	About 420	6-26	0930	4.67	434

GREAT MIAMI RIVER BASIN

145

03260800 Stony Creek near De Graff, Ohio

LOCATION.--Lat 40°17'27", long 83°54'36", in NW 1/4 sec. 5, R.13, T.3, Logan County, on right bank at downstream side of county road bridge, 0.6 mile downstream from Lee Creek, 1.5 miles south of De Graff, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--59.1 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 967.54 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 46.5 cfs (10.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 710 cfs Feb. 22 (gage height, 7.60 ft); minimum, 7.6 cfs Aug. 18.
Period of record: Maximum discharge, 2,770 cfs Jan. 22, 1959 (gage height, 9.39 ft); maximum gage height, 11.48 ft Jan. 22, 1959 (backwater from Great Miami River); minimum, 4.0 cfs Sept. 27, 1963.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	18	18	13	74	36	21	20	100	12	9.0
2	13	20	17	17	13	65	43	21	24	55	12	11
3	12	20	26	18	15	58	39	21	23	39	12	12
4	12	17	32	113	100	50	36	20	22	31	12	12
5	12	17	26	70	442	45	35	20	21	26	12	11
6	12	16	28	40	214	55	33	35	27	24	11	17
7	12	15	20	30	80	83	33	33	84	21	11	20
8	12	15	18	24	46	58	31	58	43	19	11	13
9	13	16	18	21	39	46	30	45	32	19	11	12
10	15	17	18	19	36	48	29	35	27	19	11	11
11	14	16	20	18	35	46	28	31	24	21	12	14
12	19	16	50	18	100	64	27	78	22	18	11	13
13	27	16	46	21	85	104	29	60	29	16	10	12
14	23	17	35	44	64	88	31	45	29	15	10	11
15	21	19	30	26	52	118	29	37	23	14	10	11
16	17	17	30	21	50	106	27	33	21	14	10	11
17	16	17	40	18	253	78	27	30	20	13	9.3	11
18	15	17	35	16	258	64	26	27	18	13	9.0	11
19	15	18	32	15	245	66	24	25	18	13	8.7	11
20	16	25	27	14	299	66	24	25	17	13	31	20
21	17	23	29	14	132	60	24	24	18	12	17	15
22	16	20	54	14	521	64	24	23	16	12	14	13
23	15	19	67	13	324	57	23	22	15	11	12	12
24	15	18	45	13	143	50	22	23	14	20	10	12
25	14	18	34	13	97	46	22	35	36	16	10	13
26	14	17	28	14	118	44	22	29	453	15	10	28
27	14	17	24	15	134	42	21	26	164	14	11	22
28	14	17	22	15	92	41	23	24	86	13	11	18
29	15	19	20	14	-----	39	22	23	55	13	11	15
30	18	19	19	13	-----	37	21	22	39	13	9.9	13
31	15	-----	18	13	-----	35	-----	20	-----	13	9.0	-----
TOTAL	476	533	926	732	4,000	1,897	841	971	1,440	655	360.9	414.0
MEAN	15.4	17.8	29.9	23.6	143	61.2	28.0	31.3	48.0	21.1	11.6	13.8
MAX	27	25	67	113	521	118	43	78	453	100	31	28
MIN	12	15	17	13	13	35	21	20	14	11	8.7	9.0
CFSM	.26	.30	.51	.40	2.42	1.04	.47	.53	.81	.36	.20	.23
IN.	.30	.34	.58	.46	2.52	1.19	.53	.61	.91	.41	.23	.26
CAL YR 1970	TOTAL 18,375.0			MEAN 50.3	MAX 794	MIN 11	CFSM .85	IN 11.57				
WTR YR 1971	TOTAL 13,245.9			MEAN 36.3	MAX 521	MIN 8.7	CFSM .61	IN 8.34				

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-9	0545	7.45	575	2-22	1430	7.60	710
2-17	1800	6.86	432	6-26	0645	7.20	570
2-20	0100	6.76	412				

GREAT MIAMI RIVER BASIN

03261500 Great Miami River at Sidney, Ohio

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, on right bank 50 ft upstream from North Street Bridge in Sidney, and 0.5 mile downstream from Tavava Creek.

DRAINAGE AREA.--541 sq mi.

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft above mean sea level, adjustment of 1912. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft downstream at datum 1.76 ft higher. Sept. 18, 1919, to Aug. 1925, nonrecording gage at site 50 ft downstream at present datum.

AVERAGE DISCHARGE.--46 years (1925-71), 462 cfs.

EXTREMES.--Current year: Maximum discharge, 4,720 cfs Feb. 22; maximum gage height 8.41 ft Feb. 22, result of ice jam; minimum, 29 cfs Aug. 20 (gage height, 0.18 ft).

Period of record: Maximum discharge, 20,700 cfs Mar. 20, 1927 (gage height, 14.4 ft), from rating curve extended above 6,900 cfs on basis of velocity-area studies; maximum gage height, 15.91 ft Jan. 21, 1959; minimum discharge, 1.5 cfs Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 cfs Sept. 23, 1935.

Flood of Mar. 25, 1913 reached a stage of 19.6 ft, present datum (discharge, 44,000 cfs, computed by Miami Conservancy District).

REMARKS.--Records good except those for winter period which are fair. Water supply for city of Sidney is pumped from the Great Miami River 1,200 feet upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 1.4 cfs in 1971 and is returned as sewage 1.2 miles downstream from the station. Some regulation by Indian Lake 28 miles upstream, (capacity, 45,900 acre-ft). Water diverted into Miami & Erie Canal at Port Jefferson (2.6 miles upstream) prior to 1926 bypassed station; amount of diversion not published. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 1305: 1914(M), 1922(M). WSP 1900: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	50	75	74	60	1,040	198	98	122	393	75	33
2	37	51	73	72	58	778	241	92	127	298	66	39
3	36	65	80	76	56	624	290	102	326	215	60	42
4	36	65	96	260	200	555	272	117	511	156	56	45
5	30	59	100	598	1,600	343	229	100	316	128	60	45
6	31	53	89	280	1,100	314	275	162	236	116	65	47
7	32	51	80	180	550	773	288	678	388	99	54	72
8	31	49	76	160	260	710	198	1,230	250	81	49	68
9	32	48	75	140	180	453	158	1,380	206	75	45	51
10	40	52	75	120	170	432	183	998	161	81	45	43
11	38	49	77	110	160	428	159	642	122	95	48	39
12	45	45	124	100	252	531	127	778	106	248	53	42
13	59	49	204	95	559	1,180	128	863	116	248	65	41
14	75	50	185	160	390	1,330	189	522	139	179	46	41
15	64	57	141	200	250	1,380	189	387	117	152	41	42
16	60	70	125	150	183	1,500	156	314	96	105	39	38
17	54	108	148	130	848	1,160	143	255	88	91	40	35
18	51	238	161	110	2,010	868	143	238	72	86	38	35
19	44	238	158	100	2,160	714	143	208	66	77	35	35
20	45	238	141	95	2,940	872	117	191	65	78	108	54
21	49	258	128	90	2,120	858	111	198	67	89	114	75
22	50	250	179	85	3,760	764	120	198	70	59	76	80
23	49	238	340	80	3,750	710	132	177	68	50	57	53
24	47	180	328	78	2,410	588	116	141	59	92	48	45
25	46	180	210	76	1,760	432	150	200	97	185	46	48
26	46	220	130	74	1,750	375	116	250	2,690	191	41	77
27	44	215	160	72	2,000	354	112	215	2,080	148	39	112
28	42	185	120	70	1,520	293	106	195	1,070	141	42	91
29	48	98	100	68	-----	290	106	161	511	102	40	82
30	50	77	90	64	-----	288	112	150	323	92	37	59
31	53	-----	80	62	-----	229	-----	139	-----	85	34	-----
TOTAL	1,402	3,586	4,148	4,029	33,056	21,166	5,007	11,379	10,665	4,235	1,662	1,609
MEAN	45.2	120	134	130	1,181	683	167	367	356	137	53.6	51.6
MAX	75	258	340	598	3,760	1,500	290	1,380	2,690	393	114	112
MIN	30	45	73	62	56	229	106	92	59	50	34	33
CAL YR 1970	TOTAL 151,258			MEAN 414	MAX 5,130	MIN 29						
WTR YR 1971	TOTAL 101,944			MEAN 279	MAX 3,760	MIN 30						

PEAK DISCHARGE (BASE, 4,000 cfs).-- Feb. 22 (1630) 4,720 cfs (8.32 ft).

GREAT MIAMI RIVER BASIN

147

03261950 Loramie Creek near Newport, Ohio

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec. 24, T.11N., R.4E., Shelby County, on right bank at downstream side of bridge on Cardio Roman Road, 1.1 miles northwest of Newport, 3 miles south of Fort Loramie, and 3 miles downstream from Mile Creek.

DRAINAGE AREA.--152 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 927.00 feet above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--7 years, 105 cfs.

EXTREMES.--Current year. Maximum discharge, 1,680 cfs Feb. 23 (gage height, 11.27 ft); minimum daily 0.77 cfs Oct. 2, 6.

Period of record: Maximum discharge, 2,350 cfs May 8, 1967 (gage height, 12.50 ft); minimum, 0.10 cfs several days in August 1965 and September 1966.

Flood of Mar. 25, 1913 reached a stage of 17.0 ft and flood of Jan. 21, 1959 a stage of 14.2 ft (from flood profile furnished by Miami Conservancy District).

REVISIONS.--Figures of maximum discharge and gage height for the water year 1966 have been revised to 965 cfs Feb. 11, 1966 (gage height 9.35 ft), superseding figures published in WMD Ohio 1966.

REMARKS.--Records fair. Some regulation by Lake Loramie 5 miles upstream (capacity, 13,000 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	1.8	6.5	3.7	1.8	244	23	5.4	8.4	28	3.5	1.3
2	.77	2.1	6.8	3.3	1.6	172	43	5.7	52	17	2.2	2.8
3	.82	4.3	6.0	3.7	1.4	123	57	9.1	123	11	1.7	6.8
4	.82	5.2	6.2	266	134	80	57	6.8	125	6.2	1.4	7.1
5	.82	4.3	5.0	244	585	26	52	5.4	78	4.1	1.4	14
6	.77	3.9	3.9	100	758	40	48	25	50	3.1	1.2	36
7	.94	3.1	3.5	55	226	163	28	62	32	2.7	1.0	102
8	.88	3.0	3.1	20	87	140	22	144	22	2.0	.94	40
9	.82	2.4	3.1	12	26	108	18	257	16	1.8	.88	13
10	4.5	3.9	3.1	10	20	90	19	149	9.8	2.1	.88	6.0
11	3.2	3.3	3.3	8.7	15	92	15	87	6.0	5.0	2.6	3.5
12	5.8	2.5	19	8.0	116	204	13	94	5.4	6.8	2.8	5.7
13	15	2.0	40	7.4	315	595	18	58	7.1	4.5	1.6	7.4
14	7.1	1.0	16	18	120	460	43	64	11	3.3	1.4	4.8
15	7.7	2.4	8.7	30	59	526	36	47	8.7	2.4	1.3	2.8
16	5.2	1.8	7.4	18	39	630	32	34	5.2	2.0	1.1	2.0
17	3.0	1.1	51	10	326	361	27	28	3.5	1.8	.94	1.5
18	1.8	.94	105	8.8	537	219	25	21	2.5	2.2	.88	1.2
19	1.1	.88	94	8.0	919	186	16	16	2.0	2.1	.88	1.0
20	.94	4.2	87	7.5	1,300	198	13	21	2.0	2.2	14	29
21	2.1	5.8	84	7.1	859	167	13	16	2.5	2.4	7.4	111
22	2.0	7.1	115	6.5	1,070	146	13	12	2.4	2.4	3.9	43
23	1.5	5.7	193	6.8	1,460	118	9.8	8.0	1.5	2.4	2.4	15
24	1.1	4.3	110	6.2	758	88	9.5	6.5	1.1	13	2.4	9.1
25	1.2	3.5	50	5.8	252	36	7.7	34	2.7	18	2.0	6.2
26	2.0	3.3	25	5.0	417	44	6.5	45	431	16	1.8	46
27	1.7	3.7	12	4.4	718	38	6.2	35	556	16	1.8	96
28	1.7	4.5	7.7	3.6	411	39	8.0	24	246	10	1.6	61
29	1.8	5.7	5.7	3.0	-----	39	7.4	18	111	7.4	1.4	36
30	3.0	8.0	4.5	2.6	-----	30	6.2	14	54	6.0	1.1	20
31	2.4	-----	3.9	2.2	-----	24	-----	10	-----	6.2	1.1	-----
TOTAL	83.30	109.72	1,089.4	945.1	12,268.8	5,436	692.3	1,451.9	1,977.8	210.1	69.50	731.2
MEAN	2.65	3.66	35.1	30.5	442	175	23.1	46.8	65.9	6.78	2.24	24.4
MAX	15	5.8	193	294	1,460	630	57	257	556	28	14	111
MIN	.77	.88	3.1	2.2	1.4	24	6.2	5.4	1.1	1.8	.88	1.0

CAL YR 1970 TOTAL 37,001.56 MEAN 101 MAX 1,920 MIN .42

WTR YR 1971 TOTAL 25,165.12 MEAN 68.9 MAX 1,460 MIN .77

PEAK DISCHARGE (BASE, 1,500 CFS REVISED).--Feb. 23 (0230) 1,680 cfs (11.27 ft).

03262000 Lorame Creek at Lockington, Ohio

LOCATION.--Lat 40°12'35", long 84°14'32", in NE 1/4 sec. 30, T.7N., R.6E., Shelby County, on left bank at downstream side of county road bridge, 1,300 ft downstream from Lockington Dam, 0.5 mile northwest of Lockington, and 1.5 miles upstream from mouth.

DRAINAGE AREA.--257 sq mi.

PERIOD OF RECORD.--October 1915 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft above mean sea level, adjustment of 1912. Prior to July 3, 1924 nonrecording gage at same site at datum 75.96 ft higher. July 3, 1924, to Aug. 17, 1926, nonrecording gage and Aug. 18 to Sept. 30, 1926, water-stage recorder, at same site at datum 74.96 ft higher.

AVERAGE DISCHARGE.--56 years, 201 cfs.

EXTREMES.--Current year: Maximum discharge during year, 3,040 cfs Feb. 22 (gage height, 82.12 ft); minimum 4.3 cfs Oct. 6 (gage height, 77.14 ft).

Period of record: Maximum discharge, 10,400 cfs May 7, 1916 (gage height, 86.4 ft, present datum), from rating curve extended above 5,400 cfs; minimum, 2.0 cfs Aug. 19, 1931.

Flood of March 25, 1913 reached a stage of 91.6 ft, present datum (discharge, 25,600 cfs, at site above Turtle Creek, drainage area, 211 sq mi, computed by Miami Conservancy District).

REMARKS.--Records good. Slight regulation by Lake Lorame (capacity, 13,000 acre-ft) 18 miles upstream. Flood flow regulated by Lockington regulated by Lockington retarding basin beginning in 1921. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 923: 1916. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	6.3	9.1	13	7.5	362	49	18	22	66	13	5.7
2	5.9	7.0	9.9	13	7.0	255	68	17	22	47	12	7.4
3	5.2	7.7	11	13	7.5	191	84	18	83	35	10	9.1
4	4.9	8.0	11	219	65	141	78	18	134	26	9.9	5.4
5	4.8	7.4	5.4	416	1,200	82	71	19	97	21	9.1	12
6	4.3	7.4	9.1	150	816	69	68	23	66	19	8.5	14
7	4.4	7.4	8.8	75	414	234	62	60	54	16	8.0	43
8	4.6	7.4	8.2	50	134	216	54	250	40	15	7.7	68
9	4.4	7.4	8.0	38	57	148	46	362	34	14	8.0	33
10	4.9	7.7	8.0	35	56	134	41	223	27	13	7.2	20
11	5.2	8.2	8.2	27	41	138	38	135	24	15	7.7	14
12	7.8	8.0	11	23	159	321	35	151	23	15	7.2	11
13	10	8.2	38	21	520	848	34	164	17	16	7.0	9.1
14	19	8.2	27	38	200	688	46	115	16	14	7.7	12
15	13	8.2	22	54	110	824	57	80	19	12	7.2	11
16	10	8.2	17	38	64	840	51	65	18	12	7.4	8.8
17	9.9	8.2	16	31	510	560	47	55	15	10	6.3	8.0
18	8.8	8.8	68	23	1,210	340	44	47	13	9.9	6.3	7.0
19	8.0	8.2	74	24	1,470	290	41	40	11	10	5.9	6.3
20	8.0	9.1	66	20	1,580	311	33	38	9.9	9.4	9.5	9.9
21	8.2	9.4	65	19	1,100	255	30	38	10	9.1	17	57
22	7.7	9.9	81	17	2,100	222	31	32	9.4	8.2	18	76
23	7.0	9.6	173	17	1,790	186	30	27	9.4	8.0	11	40
24	6.8	8.5	120	16	584	144	25	25	8.8	15	8.8	23
25	7.0	8.2	76	16	443	94	23	28	24	23	7.2	18
26	6.8	8.2	62	14	672	72	23	55	1,170	29	6.5	19
27	6.8	8.2	42	12	960	71	20	50	744	31	6.8	76
28	6.3	8.0	26	11	624	68	21	43	393	27	6.3	80
29	6.5	8.2	19	10	-----	66	20	35	171	20	6.1	52
30	6.8	8.5	16	9.0	-----	59	20	29	95	16	6.3	37
31	6.5	-----	15	8.0	-----	52	-----	25	-----	14	5.7	-----
TOTAL	225.8	243.7	1,134.9	1,473.0	17,701.0	8,321	1,290	2,285	3,379.5	595.6	265.3	796.7
MEAN	7.28	8.12	36.6	47.4	632	268	43.0	73.7	113	19.2	8.56	26.6
MAX	19	9.9	173	416	2,100	824	84	262	1,170	66	18	80
MIN	4.3	6.3	8.0	8.0	7.0	52	20	17	8.8	8.0	5.7	5.7

CAL YR 1970 TOTAL 61,221.6 MEAN 168 MAX 3,320 MIN 4.3
WTR YR 1971 TOTAL 37,708.5 MEAN 103 MAX 2,100 MIN 4.3

03262700 Great Miami River at Troy, Ohio

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, 400 ft downstream from B&O Railroad bridge, 1,300 ft downstream from bridge on State Highway 55 at Troy, 1.2 miles upstream from small left bank tributary, and 2.3 miles downstream from Spring Creek.

DRAINAGE AREA.--926 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961, 1962 (published as Miami River at Troy). October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.67 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 650 cfs.

EXTREMES.--Current year: Maximum discharge, 9,920 cfs Feb. 22 (gage height, 10.50 ft); minimum, 1.3 cfs July 23 (gage height, 1.87 ft), result of temporary storage due to dam closure upstream; minimum daily discharge 45 cfs July 23.

Period of record: Maximum discharge, 17,300 cfs Mar. 6, 1963 (gage height, 14.66 ft); minimum, 0.50 cfs July 12, 13, 1963 (gage height, 2.37 ft), result of temporary storage during repair of dam upstream; minimum daily discharge, 16 cfs July 13, Oct. 7, 1963.

Flood of June 11, 1958 reached a stage of 16.4 ft (discharge 21,000 cfs).

REMARKS.--Records good. Flood flow regulated by retarding basin on Loraine Creek, 18 miles upstream. Low and medium flow slightly regulated by Indian Lake (capacity, 45,900 acre-ft) 54 miles upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 3.1 cfs in 1971 and is returned as sewage 1 mile downstream from the station. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 13 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	72	108	89	76	1,800	337	146	180	616	95	52
2	66	76	107	108	74	1,320	373	132	176	552	89	53
3	63	82	127	110	72	1,080	488	126	230	403	95	29
4	61	85	134	477	280	931	472	135	778	283	89	81
5	60	93	120	1,460	3,200	672	433	155	576	220	81	84
6	50	79	115	680	2,780	544	418	199	388	194	81	95
7	46	75	106	300	1,750	1,050	464	608	488	171	71	100
8	46	69	103	240	773	1,260	388	1,430	456	150	60	163
9	45	66	108	210	290	823	295	2,020	289	111	60	128
10	61	77	109	190	260	769	230	1,490	265	103	62	92
11	69	83	113	170	282	744	265	994	204	125	61	84
12	79	80	156	160	396	913	215	1,110	146	155	75	74
13	103	77	219	158	1,420	2,310	210	1,290	135	358	90	71
14	117	70	328	175	971	2,440	235	913	146	253	82	73
15	110	76	225	298	619	2,540	337	592	155	204	76	64
16	87	78	192	229	376	2,770	271	480	150	176	72	58
17	85	95	191	197	1,540	2,160	235	403	132	135	68	57
18	79	169	209	146	4,120	1,540	220	337	122	125	78	55
19	76	256	288	140	4,040	1,220	220	295	95	115	68	52
20	74	263	256	140	5,990	1,320	189	283	61	105	85	103
21	52	280	216	122	3,990	1,350	167	253	79	100	167	108
22	73	289	290	118	6,870	1,150	163	235	89	142	139	194
23	69	274	575	113	6,960	1,090	176	235	89	45	111	122
24	71	244	751	105	4,200	940	189	210	95	71	75	100
25	69	188	477	115	2,650	728	171	277	97	171	66	81
26	69	211	200	132	2,610	592	235	344	6,340	289	64	118
27	66	240	150	91	3,570	584	225	358	4,100	241	53	176
28	70	250	120	101	2,640	488	180	295	2,150	210	58	247
29	71	197	100	101	-----	464	142	253	1,080	184	68	171
30	73	119	95	90	-----	448	142	220	648	116	62	132
31	69	-----	90	40	-----	395	-----	199	-----	103	66	-----
TOTAL	2,220	4,313	6,378	6,845	62,799	36,435	8,085	16,019	19,959	6,228	2,479	3,078
MEAN	71.6	144	206	221	2,243	1,175	270	517	665	201	80.0	103
MAX	117	289	751	1,460	6,960	2,770	488	2,020	6,340	616	167	247
MIN	46	66	90	80	72	395	142	128	79	45	53	52
CAL YR 1970	TOTAL 258,994	MEAN 710	MAX 8,930	MIN 32								
WTR YR 1971	TOTAL 174,838	MEAN 479	MAX 6,960	MIN 45								

03263000 Great Miami River at Taylorsville, Ohio

LOCATION.—Lat 39°52'22", long 84°09'51", in SW 1/4 sec. 36, R.8, T.2, Montgomery County, on left bank 600 ft downstream from Taylorsville Dam, 0.8 mile north of Taylorsville, and 2.5 miles upstream from Stillwater River.

DRAINAGE AREA.—1,149 sq mi.

PERIOD OF RECORD.—January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (published as Miami River at Taylorsville 1921-62). Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site at Tadmor, January 1914 to July 1920, are contained in reports of the National Weather Service.

GAGE.—Water-stage recorder. Datum of gage is 700.08 ft above mean sea level, adjustment of 1912. Prior to October 1921, nonrecording gage at site 1.8 miles upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 600 ft upstream at outlet works of Taylorsville Dam at present datum.

AVERAGE DISCHARGE.—53 years, 966 cfs (11.42 inches per year).

EXTREMES.—Current year: Maximum discharge, 13,100 cfs June 27 (gage height, 71.12 ft); minimum, 64 cfs Oct. 9.

Period of record: Maximum discharge, 31,400 cfs Jan. 22, 1959 (gage height, 75.44 ft); minimum, 30 cfs Jan. 2, 1945.

Flood in March 1913 reached a stage of 25.4 ft at site at Tadmor (discharge, 127,000 cfs, computed by Miami Conservancy District).

REMARKS.—Records good. Flood flow regulated by retarding basins on Great Miami River, just upstream from station and on Loraine Creek 20 miles upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake 64 miles upstream from station, and by Lake Loraine 47 miles upstream from station on Loraine Creek (combined capacity, 50,900 acre-ft). Water-quality records for the current year are published for Station 03263110 in Part 2 of this report.

COOPERATION.—Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).—WSP 743: 1924(M), WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1305: 1916. WSP 1900: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	90	133	151	103	2,180	472	211	273	941	148	85
2	82	103	133	142	107	1,650	521	197	262	1,040	143	60
3	83	122	135	151	116	1,330	570	194	256	630	155	116
4	77	114	168	522	760	1,030	570	192	641	476	168	125
5	77	122	146	1,310	4,200	914	535	208	674	387	146	102
6	74	114	140	961	2,870	764	517	308	467	331	134	118
7	67	100	133	650	1,730	1,230	530	487	512	298	125	256
8	66	92	120	590	896	1,540	508	1,640	630	262	110	178
9	63	89	122	400	777	1,050	404	2,180	395	236	102	194
10	68	98	126	330	652	955	343	1,750	335	197	96	138
11	78	107	126	290	600	927	347	1,210	287	233	112	118
12	95	109	171	260	590	1,020	331	1,150	236	226	114	143
13	131	101	214	240	1,420	2,510	308	1,420	192	359	104	110
14	124	100	303	259	1,500	2,750	331	1,110	194	347	114	110
15	149	105	275	321	983	2,690	383	746	203	373	100	98
16	120	101	231	303	512	3,140	379	610	200	252	89	92
17	100	111	252	272	1,480	2,440	335	530	186	208	85	73
18	100	137	243	225	4,760	1,810	312	454	170	189	90	74
19	97	262	282	225	4,370	1,460	304	426	153	176	92	71
20	101	292	285	194	7,140	1,480	294	440	129	170	108	110
21	111	296	265	208	4,550	1,500	259	355	127	158	160	173
22	105	299	365	191	6,610	1,290	248	335	127	155	214	178
23	93	296	490	176	10,000	1,240	248	323	129	173	168	183
24	90	249	687	166	5,220	1,090	266	312	129	181	129	136
25	92	231	522	166	3,040	884	242	387	132	248	102	118
26	86	222	353	178	2,780	734	273	431	7,130	287	98	146
27	84	246	317	122	4,160	696	294	462	9,000	315	89	176
28	87	246	299	137	3,130	636	270	400	2,990	259	68	266
29	92	237	246	140	-----	585	226	359	1,650	284	80	230
30	101	173	189	135	-----	565	203	315	1,020	203	83	165
31	95	-----	154	112	-----	521	-----	287	-----	165	70	-----
TOTAL	2,870	4,964	7,625	9,437	75,056	42,611	10,823	19,429	28,829	9,761	3,596	4,142
MEAN	92.6	165	246	304	2,681	1,375	361	627	961	315	116	138
MAX	149	299	687	1,310	10,000	3,140	570	2,180	9,000	1,040	214	266
MIN	63	89	120	112	103	521	203	192	127	155	68	60
CFSM	.08	.14	.21	.26	2.33	1.20	.31	.55	.84	.27	.10	.12
IN.	.09	.16	.25	.31	2.43	1.38	.35	.63	.93	.32	.12	.13

CAL YR 1970 TOTAL 319,114 MEAN 874 MAX 12,600 MIN 63 CFSM .76 IN 10.33
 MTR YR 1971 TOTAL 219,143 MEAN 600 MAX 10,000 MIN 60 CFSM .52 IN 7.09

03264000 Greenville Creek near Bradford, Ohio

LOCATION.—Lat 40°06'08", long 84°25'48", between secs. 33 and 34, T.9N., R.4E., on boundary line of Darke and Miami Counties, on left bank at downstream side of bridge on State Highway 721, 0.8 mile downstream from small left bank tributary, 1.6 miles south of Bradford, and 6 miles upstream from mouth.

DRAINAGE AREA.—193 sq mi.

PERIOD OF RECORD.—October 1930 to current year. Prior to April 1931, monthly discharge only, published in WSP 1305.

GAGE.—Water-stage recorder. Datum of gage is 946.9 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1942, nonrecording gage at same site and datum. Apr. 6, 1942 to Nov. 13, 1963, water-stage recorder at site 200 ft downstream at same datum.

AVERAGE DISCHARGE.—61 years, 167 cfs (11.75 inches per year).

EXTREMES.—Current year: Maximum discharge, 2,400 cfs Feb. 23 (gage height 6.26 ft); minimum, 5.1 cfs Aug. 16.
Period of record: Maximum discharge, 9,320 cfs May 14, 1933 (gage height, 7.2 ft); maximum gage height, 10.31 ft Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 cfs Sept. 17, 1963 (gage height, 1.06 ft).
Flood in March 1913 reached a stage of 12.1 ft (discharge, 18,200 cfs, at site with drainage area of 213 sq mi, computed by Miami Conservancy District).

REMARKS.—Records good except those for the winter period, which are fair. Some diurnal fluctuation caused by mill 8 miles upstream from station; daily flows are not affected appreciably. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.—Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).—WSP 603: 1933(M). WSP 1235: 1936, 1937(M), WND 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	24	34	28	21	302	95	57	74	35	27	12
2	19	24	34	28	20	225	109	57	107	38	24	13
3	18	34	42	30	20	193	104	62	134	31	26	15
4	16	31	60	340	240	156	92	65	105	24	25	24
5	15	27	52	465	1,500	138	84	61	89	21	23	20
6	16	27	41	160	450	160	82	99	78	24	46	24
7	17	25	37	100	260	202	85	142	74	24	29	75
8	17	25	34	90	160	180	79	477	83	23	8.3	44
9	16	24	34	80	110	145	77	473	76	21	10	25
10	29	36	34	75	95	143	72	277	63	43	17	19
11	23	31	37	70	80	151	65	217	57	69	21	17
12	27	29	78	66	220	246	65	598	57	41	21	17
13	67	29	95	64	520	625	71	451	59	32	37	17
14	46	29	73	100	210	478	77	266	59	31	36	14
15	34	36	59	112	136	560	71	187	59	23	12	15
16	27	35	53	72	85	568	67	156	48	21	5.6	19
17	25	34	69	64	230	348	65	147	42	21	13	13
18	21	31	80	58	1,500	263	64	158	39	22	16	13
19	20	29	71	54	1,200	251	58	128	37	23	15	13
20	21	44	56	50	1,760	277	57	126	36	25	17	36
21	43	49	51	46	713	227	57	107	37	25	18	90
22	36	44	116	42	1,580	197	63	97	40	20	18	43
23	30	33	170	38	1,990	168	58	92	36	19	14	26
24	27	26	127	35	572	152	57	91	32	54	15	16
25	25	33	75	32	332	142	60	172	31	52	14	17
26	23	29	40	30	504	134	52	209	136	39	15	39
27	25	33	42	32	795	126	54	133	67	64	14	48
28	23	31	40	28	416	118	59	107	39	52	13	34
29	24	31	36	26	-----	110	59	93	35	50	12	25
30	26	32	32	24	-----	100	57	84	30	35	12	21
31	25	-----	30	22	-----	95	-----	76	-----	31	14	-----
TOTAL	800	945	1,832	2,461	15,713	7,180	2,115	5,459	1,859	1,033	587.9	810
MEAN	25.8	31.5	59.1	79.4	561	232	70.5	176	62.6	33.3	19.0	27.0
MAX	67	49	170	465	1,990	625	109	598	136	69	46	90
MIN	15	24	38	22	20	95	52	57	30	19	5.6	12
CFSM	.13	.16	.31	.41	2.91	1.20	.37	.91	.32	.17	.10	.14
IN.	.15	.18	.35	.47	3.03	1.38	.41	1.05	.36	.20	.11	.16
CAL YR 1970	TOTAL 54,993.0 MEAN 151 MAX 2,200 MIN 9.0 CFSM .78 IN 10.60											
WTR YR 1971	TOTAL 40,794.9 MEAN 112 MAX 1,990 MIN 5.6 CFSM .58 IN 7.86											

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	1900	5.63	1,900	2-23	0530	6.26	2,400
2-20	1600	5.58	1,870				

GREAT MIAMI RIVER BASIN

03265000 Stillwater River at Pleasant Hill, Ohio

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec. 18, T.7N., R.5E., Miami County, on left bank at downstream side of bridge on Lauver Road, 0.6 mile northwest of Pleasant Hill, 2 miles downstream from Painter Creek, and 2 miles upstream from Canyon Run.

DRAINAGE AREA.--503 sq mi.

PERIOD OF RECORD.--October 1916 to September 1928, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site March 1922 to December 1963 are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft above mean sea level, adjustment of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--49 years, 433 cfs (11.69 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,660 cfs Feb. 22 (gage height, 10.12 ft); minimum 9.4 cfs Aug. 18). Period of record: Maximum discharge, 26,400 cfs Jan. 14, 1937, from rating curve extended above 14,000 cfs on basis of velocity-area study; maximum gage height, 17.98 ft Jan. 21, 1939; minimum discharge observed, 4 cfs Oct. 17, 1920, July 12, 22, Aug. 30, 1921.

Flood of March 25, 1913 reached a discharge of 51,400 cfs (gage height, 17.5 ft) at site about 3 miles upstream, computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

REMARKS.--Records fair Oct. 1 to Feb. 20, good thereafter. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 12 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 523: 1917. WSP 1305: 1920(M), 1922-25(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	40	50	66	44	733	182	87	114	126	45	24
2	27	44	48	64	41	604	212	83	139	179	39	25
3	28	44	50	66	40	520	214	84	253	151	36	31
4	23	45	55	604	700	410	189	89	192	98	40	38
5	22	43	75	1,100	3,200	327	168	84	146	77	36	42
6	23	43	65	430	1,700	327	160	123	124	69	41	43
7	24	43	60	200	400	646	160	187	117	65	49	76
8	26	42	56	180	160	562	154	778	121	60	32	111
9	25	42	54	160	140	385	144	990	117	54	15	72
10	29	44	52	140	120	360	136	543	97	60	17	49
11	30	45	50	130	120	380	123	412	87	98	29	38
12	37	46	54	120	150	670	119	1,030	84	78	31	34
13	34	46	80	110	1,000	2,110	127	897	84	64	35	31
14	70	50	138	140	400	1,440	142	541	83	56	50	31
15	62	50	107	180	230	1,650	134	378	84	47	40	34
16	50	52	92	130	190	1,720	125	306	73	40	18	34
17	47	52	98	110	1,190	929	126	262	64	40	10	36
18	45	52	100	85	3,400	652	119	266	58	39	15	30
19	43	50	98	80	3,010	625	111	223	54	42	21	30
20	46	60	105	80	4,870	710	104	198	66	41	27	53
21	50	70	100	85	2,000	568	107	173	92	42	31	161
22	54	65	141	80	4,630	478	111	149	90	38	36	158
23	50	58	240	75	4,920	416	107	136	78	34	32	87
24	44	52	213	70	1,450	353	100	133	69	72	26	61
25	46	48	138	65	803	311	97	221	65	99	28	53
26	42	46	110	60	1,410	286	93	477	1,680	72	26	70
27	42	48	100	50	2,480	268	87	262	1,090	83	27	145
28	40	46	90	60	1,220	249	93	190	352	76	26	139
29	40	48	80	56	-----	235	94	156	192	77	24	87
30	39	50	75	52	-----	205	89	137	134	64	23	66
31	39	-----	70	48	-----	183	-----	123	-----	53	22	-----
TOTAL	1,232	1,470	2,844	4,876	40,038	19,354	3,927	9,718	5,999	2,192	927	1,890
MEAN	39.7	49.0	91.7	157	1,430	624	131	313	200	70.7	29.9	63.0
MAX	70	70	240	1,100	4,920	2,110	214	1,030	1,680	179	50	161
MIN	22	40	48	48	40	183	87	83	54	34	10	24
CFSM	.09	.10	.18	.31	2.84	1.24	.26	.62	.40	.14	.06	.13
IN.	.09	.11	.21	.36	2.96	1.43	.29	.72	.44	.16	.07	.14
CAL YR 1970	TOTAL 127,508	MEAN 344	MAX 6,560	MIN 13	CFSM .69	IN 9.43						
WTR YR 1971	TOTAL 94,467	MEAN 259	MAX 4,920	MIN 10	CFSM .51	IN 6.99						

PEAK DISCHARGE (BASE, 5,000 CFS REVISED).--Feb. 22 (1830): 6,660 cfs (10.12 ft).

GREAT MIAMI RIVER BASIN

153

03266000 Stillwater River at Englewood, Ohio

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec. 23, T.5N., R.5E., Montgomery County, on right bank 1,000 ft downstream from Englewood Dam, 1 mile southeast of Englewood, and 8.5 miles upstream from mouth.

DRAINAGE AREA.--650 sq mi.

PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.97 ft above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--46 years, 561 cfs (11.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,380 cfs Feb. 23 (gage height, 77.57 ft); minimum, 21 cfs Aug. 19 (gage height 71.71 ft).
Period of record: Maximum discharge, 9,980 cfs June 15, 1958 (gage height, 80.88 ft); minimum, 3.7 cfs Sept. 30, Oct. 1, 1944 (gage height, 71.36 ft).
Flood of March 1913 reached a discharge of 85,400 cfs at site one mile downstream, computed by Miami Conservancy District.

REMARKS.--Record good. Flood flow regulated by Englewood retarding basin. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 9 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	51	63	99	60	1,050	260	131	172	160	66	26
2	38	57	63	99	56	825	290	131	172	160	58	29
3	36	60	66	102	54	717	297	128	215	195	64	41
4	33	58	78	368	496	584	278	125	284	152	74	45
5	33	57	92	1,170	3,030	472	254	128	220	112	78	39
6	31	57	89	600	3,030	448	236	180	185	94	51	48
7	31	57	80	350	852	744	225	248	164	80	48	54
8	30	54	72	280	400	807	225	735	160	76	57	68
9	31	54	66	240	330	560	215	1,360	156	102	51	99
10	35	57	64	220	250	488	205	816	148	87	39	74
11	35	57	64	195	220	496	185	576	134	89	34	57
12	52	60	84	176	311	636	176	771	125	107	35	45
13	66	60	115	164	479	2,180	180	1,140	125	92	37	39
14	80	63	172	185	708	1,990	195	735	118	74	37	35
15	89	64	152	236	384	1,700	195	520	115	66	45	34
16	74	63	137	200	297	2,220	185	408	112	60	45	32
17	61	64	140	150	816	1,300	180	353	99	54	35	33
18	55	63	137	110	3,130	870	176	325	89	51	26	34
19	51	60	148	110	3,340	780	168	318	82	51	23	31
20	55	76	148	100	4,250	834	156	318	78	51	25	49
21	60	78	131	100	4,270	753	156	266	82	48	30	51
22	58	84	160	96	3,580	627	156	230	78	48	42	160
23	68	80	260	92	5,260	552	156	205	74	45	38	148
24	61	72	368	90	4,720	480	152	200	74	82	36	92
25	57	61	266	86	2,020	424	144	266	68	87	34	66
26	54	61	176	82	1,260	392	140	488	726	104	34	70
27	52	64	156	80	2,840	360	134	416	1,700	80	32	72
28	51	63	148	78	2,000	339	140	290	560	89	30	148
29	52	66	128	72	-----	325	137	242	290	107	30	140
30	52	66	118	68	-----	297	137	210	190	89	28	94
31	51	-----	112	64	-----	266	-----	190	-----	80	26	-----
TOTAL	1,571	1,887	4,053	6,062	48,843	24,516	5,733	12,449	6,795	2,772	1,268	1,953
MEAN	50.7	62.9	131	196	1,744	791	191	402	227	89.4	40.9	65.1
MAX	89	84	368	1,170	5,260	2,220	297	1,360	1,700	195	74	160
MIN	30	51	63	64	54	266	134	125	68	48	23	26
CFSM	.08	.10	.20	.30	2.68	1.22	.29	.62	.35	.14	.06	.10
IN.	.09	.11	.23	.35	2.80	1.40	.33	.71	.39	.16	.07	.11
CAL YR 1970	TOTAL 165,429	MEAN 453	MAX 5,800	MIN 26	CFSM .70	IN 9.47						
WTR YR 1971	TOTAL 117,902	MEAN 323	MAX 5,260	MIN 23	CFSM .50	IN 6.75						

GREAT MIAMI RIVER BASIN

03266500 Mad River at Zanesfield, Ohio

LOCATION.--Lat 40°21'01", long 83°40'28", Logan County, on left bank at upstream side of bridge on County Road No. 5 (adjacent to former U.S. Highway 33), 0.8 mile upstream from Sugar Creek, and 1 mile north of Zanesfield.

DRAINAGE AREA.--7.31 sq mi.

PERIOD OF RECORD.--August 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,208.28 ft above mean sea level.

AVERAGE DISCHARGE.--25 years, 7.50 cfs (13.93 inches per year).

EXTREMES.--Current year: Maximum discharge, about 200 cfs Feb. 22; maximum gage height 2.37 ft Feb. 22 (result of ice jam); minimum, 0.80 cfs part of each day Aug. 11-19, 23, 24, 31, Sept. 5, 10, 23-25.

Period of record: Maximum discharge, 1,360 cfs Apr. 11, 1948 (gage height, 6.76 ft), from rating curve extended above 220 cfs on basis of critical-depth measurements at gage heights 5.29 ft and 4.46 ft; minimum, 0.30 cfs Jan. 16, 1966 (gage height, 0.58 ft), result of freezeup.

REMARKS.--Records fair except those for the winter period which are poor. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.4	1.8	1.7	1.7	7.6	6.1	3.2	3.7	4.9	1.6	1.4
2	1.3	1.4	1.3	1.6	1.6	6.7	8.3	3.4	6.7	3.2	1.6	1.1
3	1.4	1.6	3.4	1.7	2.0	5.8	6.6	3.7	8.6	2.9	1.6	1.1
4	1.4	1.6	3.7	4.0	1.0	5.0	6.0	4.3	6.2	2.7	1.2	1.3
5	1.4	1.4	2.6	7.5	5.0	4.3	5.4	4.9	4.3	2.4	1.6	1.3
6	1.3	1.4	2.0	3.4	7.0	6.4	4.9	25	3.7	2.4	1.6	1.5
7	1.4	1.4	1.8	2.7	3.8	12	4.6	14	3.7	2.2	1.4	1.5
8	1.4	1.4	1.7	2.3	2.9	7.3	4.3	21	3.4	2.2	1.4	1.3
9	1.4	1.4	1.6	2.0	2.5	6.2	4.2	10	3.2	2.2	1.4	1.3
10	1.6	1.4	1.6	1.8	2.2	5.5	4.1	7.6	2.9	2.2	1.4	1.2
11	1.8	1.4	2.4	1.7	3.0	4.6	4.0	6.7	2.9	3.2	1.6	1.4
12	2.6	1.4	11	1.6	7.7	9.5	3.7	31	2.9	2.4	1.4	1.5
13	3.4	1.4	6.0	1.8	6.0	19	4.3	13	2.9	2.2	1.2	1.5
14	2.8	1.6	3.7	5.5	4.4	13	5.5	9.0	2.7	1.8	1.2	1.5
15	2.6	1.6	3.0	4.2	3.5	30	4.6	7.6	2.7	1.8	1.2	1.5
16	2.2	1.6	3.0	3.2	2.7	18	4.3	6.7	2.4	1.8	1.2	1.6
17	1.8	1.6	4.6	2.6	4.7	12	4.3	6.4	2.2	1.8	1.2	1.5
18	1.8	1.6	3.7	2.2	3.7	9.3	4.0	5.5	2.0	1.8	1.2	1.6
19	1.8	1.6	3.0	2.0	8.3	10	4.0	5.5	2.0	2.0	1.2	1.9
20	1.8	3.0	3.0	1.9	4.8	9.3	4.0	5.5	2.0	2.0	1.4	2.5
21	2.0	2.8	2.8	1.8	12	13	4.0	4.6	2.2	1.8	1.4	1.4
22	2.0	2.0	12	1.7	10.0	15	4.0	4.6	2.2	1.8	1.4	1.3
23	1.8	1.4	6.5	1.6	26	10	3.7	4.3	2.0	1.8	1.4	1.2
24	1.6	1.3	3.7	1.6	9.7	8.3	3.4	4.3	2.0	3.4	1.2	1.2
25	1.6	1.3	2.6	1.5	10	8.0	3.4	9.0	2.7	2.2	1.2	1.4
26	1.6	1.3	2.4	1.4	17	7.3	3.2	6.4	3.7	1.8	1.6	2.5
27	1.6	1.3	2.2	1.7	17	6.7	3.2	5.5	6.1	1.8	1.6	2.0
28	1.6	1.3	2.1	2.0	9.3	6.7	3.7	5.2	4.0	1.6	1.4	1.5
29	1.6	1.6	2.0	2.0	-----	6.4	3.4	4.6	3.4	1.8	1.4	1.3
30	1.6	1.8	1.9	1.9	-----	5.8	3.4	4.0	4.9	1.8	1.2	1.3
31	1.6	-----	1.8	1.8	-----	5.8	-----	3.7	-----	1.8	1.2	-----
TOTAL	55.0	47.3	105.1	110.4	527.0	294.5	132.6	250.2	136.6	69.7	43.4	44.5
MEAN	1.77	1.58	3.39	3.56	18.8	9.50	4.42	8.07	4.55	2.25	1.40	1.48
MAX	3.4	3.0	12	4.0	10.0	30	8.3	31	3.7	4.9	1.8	2.5
MIN	1.2	1.3	1.3	1.4	1.6	4.3	3.2	3.2	2.0	1.6	1.2	1.0
CFSM	.24	.22	.46	.49	2.57	1.30	.60	1.10	.62	.31	.19	.20
IN.	.28	.24	.53	.56	2.68	1.50	.67	1.27	.70	.35	.22	.23

CAL YR 1970 TOTAL 2,503.7 MEAN 6.86 MAX 172 MIN 1.0 CFSM .94 IN 12.74
WTR YR 1971 TOTAL 1,816.3 MEAN 4.98 MAX 100 MIN 1.0 CFSM .68 IN 9.24

PEAK DISCHARGE (BASE, 200 CFS).--Feb. 22 (time unknown) about 200 cfs.

03267000 Mad River near Urbana, Ohio

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5E., R.11W., Champaign County, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 miles upstream from Dugan Run, 1.8 miles downstream from Muddy Creek, and 2.5 miles west of Urbana.

DRAINAGE AREA.--162 sq mi.

PERIOD OF RECORD.--September 1925 to September 1931, August 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft above mean sea level. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930, to Sept. 30, 1931, nonrecording gage at site 600 ft downstream at datum 0.36 ft lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 137 cfs (11.48 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,810 cfs Feb. 22 (gage height, 7.36 ft), minimum, 19 cfs Jan. 27, result of freezeup. Period of record: Maximum discharge, 8,000 cfs Jan. 22, 1959 (gage height, 12.05 ft), from rating curve extended above 4,000 cfs on basis of estimate of peak flow based on contracted-opening measurement at site 3 miles downstream with drainage area of 235 sq mi adjusted to gage site by 0.8 power of the drainage-area ratio; minimum, 2.1 cfs Jan. 21, 1963 (gage height, 2.33 ft), result of freezeup; minimum daily, 24 cfs Feb. 2, 3, 1945, Jan. 13, 1964.

REMARKS.--Records good. Water quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 1305: 1930(M). WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	59	60	66	50	197	122	82	72	131	57	48
2	66	65	59	65	50	180	131	80	77	108	57	48
3	64	64	62	66	58	166	122	82	85	95	57	49
4	62	64	70	210	246	152	117	80	77	47	57	51
5	63	63	66	150	1,320	143	111	80	70	85	55	49
6	62	61	62	98	200	152	105	108	68	82	53	59
7	60	61	60	85	130	232	105	100	95	77	53	80
8	62	58	60	75	95	166	105	140	85	75	51	55
9	61	61	60	70	85	143	103	114	77	75	51	49
10	63	61	59	70	80	146	100	100	72	77	51	46
11	61	59	61	68	75	140	95	92	72	80	49	51
12	68	59	98	66	95	152	97	146	72	77	46	49
13	80	59	107	65	155	268	97	125	72	75	46	46
14	73	60	84	97	103	222	100	105	70	77	46	43
15	73	62	76	80	92	288	92	95	70	72	43	43
16	68	61	76	69	82	250	92	92	68	70	43	41
17	66	61	83	66	530	197	95	90	66	70	39	41
18	64	61	82	64	505	176	92	87	64	68	39	41
19	64	60	77	62	630	183	92	85	62	72	41	41
20	66	67	72	60	882	183	87	90	64	70	64	51
21	68	68	71	60	276	162	87	82	68	68	49	51
22	65	65	95	58	1,480	194	87	75	64	64	75	44
23	64	61	142	56	585	166	90	72	64	64	53	44
24	63	60	100	56	276	149	87	75	64	75	48	44
25	63	61	89	56	222	140	87	90	68	70	44	44
26	61	61	85	56	280	140	85	87	411	66	46	59
27	61	62	79	49	316	134	85	82	180	66	46	64
28	61	60	74	64	232	131	87	80	128	64	44	57
29	62	61	72	66	-----	128	82	77	111	62	44	53
30	64	61	69	55	-----	122	82	75	97	62	44	51
31	62	-----	68	50	-----	119	-----	72	-----	59	44	-----
TOTAL	2,004	1,846	2,378	2,278	9,180	5,321	2,919	2,840	2,713	2,343	1,535	1,492
MEAN	64.6	61.5	76.7	73.5	328	172	97.3	91.6	90.4	75.6	49.5	49.7
MAX	80	68	142	210	1,480	288	131	146	411	131	75	80
MIN	60	58	59	49	50	119	82	72	62	59	39	41
CFSM	.40	.38	.47	.45	2.02	1.06	.60	.57	.56	.47	.31	.31
IN.	.46	.42	.55	.52	2.11	1.22	.67	.65	.62	.54	.35	.34
CAL YR 1970	TOTAL 53,056		MEAN 145	MAX 1,620	MIN 58	CFSM .90	IN 12.18					
WTR YR 1971	TOTAL 36,849		MEAN 101	MAX 1,480	MIN 39	CFSM .62	IN 8.46					

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0900	7.01	2,530	2-20	0330	5.66	1,530
2-17	2100	5.64	1,520	2-22	1430	7.36	2,810

GREAT MIAMI RIVER BASIN

03267500 Mad River at Tremont City, Ohio

LOCATION.--Lat 40°00'25", long 83°49'24", in NW 1/4 sec. 4, R.10, T.4, Clark County, on right bank at downstream side of bridge on Tremont City Road, 500 ft upstream from Chapman Creek, 0.6 mile southeast of Tremont City, and 1.3 miles downstream from Storms Creek.

DRAINAGE AREA.--264 sq mi.

PERIOD OF RECORD.--July 1931 to March 1933, October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 926.40 ft above mean sea level. July 23, 1931, to Mar. 31, 1933, nonrecording gage at same site at datum 2.92 ft higher.

AVERAGE DISCHARGE.--7 years (1932, 1966-71) 228 cfs.

EXTREMES.--Current year: Maximum discharge, 11,900 cfs June 26 (gage height, 16.12 ft) from rating curve extended above 2,200 cfs; minimum, 69 cfs Jan. 27, Feb. 1 (gage height 5.69 ft), result of freezeup.
Period of record: Maximum discharge, 11,900 cfs, June 26, 1971 (gage height 16.12 ft), from rating curve extended above 2,200 cfs; minimum, 69 cfs Jan. 27, Feb. 1, 1971, result of freezeup.
Flood in March 1913 reached a stage of 19.2 ft, present datum, from data furnished by Miami Conservancy District.

REMARKS.--Records good. Water supply for the city of Springfield is pumped from wells adjacent to Mad River downstream from the station. Recharge to the well field is largely by induced infiltration from the river. At times the cone of depression of the well field extends upstream from the station. See REMARKS for Station 03267800. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Ohio 1969: 1966(M) 1967(P) 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	109	114	126	84	344	197	132	126	271	100	100
2	106	117	114	123	109	317	200	132	126	222	100	97
3	103	117	117	123	97	296	204	132	135	197	106	109
4	103	114	129	292	760	271	194	132	132	180	109	106
5	103	109	123	298	1,900	252	190	132	123	170	106	103
6	103	106	114	180	376	275	187	164	120	167	103	320
7	103	106	112	150	275	400	180	170	142	154	97	267
8	106	103	114	140	190	296	177	308	135	151	94	145
9	100	106	114	130	170	255	174	214	126	148	94	145
10	103	112	114	130	150	255	170	180	120	148	97	106
11	97	109	120	120	150	248	167	167	120	167	94	180
12	114	112	184	135	245	322	160	236	120	151	89	145
13	135	112	208	138	289	485	160	208	123	145	89	123
14	129	114	164	187	180	386	164	180	123	138	89	114
15	126	114	148	160	160	480	151	164	120	132	89	109
16	117	112	148	135	150	405	148	157	117	129	84	100
17	114	112	164	120	544	326	148	154	114	123	84	100
18	112	112	157	110	782	292	148	151	114	120	81	100
19	109	112	151	110	523	296	145	148	112	123	81	103
20	117	126	142	110	1,280	296	142	151	109	117	129	138
21	114	126	135	100	430	271	142	138	120	114	120	142
22	112	120	170	100	2,380	292	138	132	112	112	183	123
23	109	114	240	100	1,010	275	138	129	109	114	126	117
24	106	109	160	100	490	252	138	129	109	151	109	114
25	106	112	140	100	386	236	138	151	256	132	106	114
26	103	112	130	100	506	233	135	151	3,440	120	103	154
27	106	112	130	89	578	222	135	138	512	117	106	157
28	109	112	138	117	405	218	135	135	353	114	103	145
29	114	114	132	114	-----	214	135	132	275	114	100	135
30	117	114	129	100	-----	204	135	132	236	112	97	164
31	112	-----	132	90	-----	197	-----	126	-----	109	97	-----
TOTAL	3,414	3,379	4,387	4,228	15,389	9,111	4,775	4,905	7,979	4,462	3,165	4,047
MEAN	110	113	142	136	500	294	159	158	266	144	102	135
MAX	135	126	240	393	2,380	485	204	308	3,440	271	183	320
MIN	97	103	112	89	84	197	135	126	109	109	81	97

CAL YR 1970 TOTAL 92,058 MEAN 252 MAX 3,680 MIN 57
WTR YR 1971 TOTAL 69,241 MEAN 190 MAX 3,440 MIN 81

PEAK DISCHARGE (BASE, 2,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0900	10.35	3,060	2-22	1300	11.40	4,180
2-17	1930	9.65	2,440	6-26	0230	16.12	11,900
2-20	0100	9.25	2,120				

GREAT MIAMI RIVER BASIN

157

03267700 Moore Run near Eagle City, Ohio

LOCATION.--Lat 39°59'24", long 83°49'03", in SE 1/4 sec. 3, R.10, T.4, Clark County, on right bank at downstream side of bridge on River Road, 0.8 mile upstream from mouth, 1.3 miles northeast of Eagle City, and 1.8 miles southeast of Tremont City.

DRAINAGE AREA.--18.2 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 926.03 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 19.2 cfs.

EXTREMES.--Current year: Maximum discharge, 1,300 cfs June 26 (gage height, 9.63 ft) from rating curve extended above 55 cfs; minimum daily 9.0 cfs May 23, 30, 31.

Period of record: Maximum discharge, 1,370 cfs May 12, 1970 (gage height 9.81 ft) from rating curve extended above 55 cfs; minimum, 1.2 cfs Aug. 10, 1970.

REMARKS.--Records poor. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, beginning about 0.9 mile downstream from station. Recharge to the well field is largely by induced infiltration from Mad River and Moore Run. See REMARKS for Station 03267800. Water-quality for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	17	15	13	25	20	12	9.5	38	16	14
2	12	17	18	14	13	24	20	12	11	25	17	14
3	12	15	18	17	13	23	18	12	12	22	20	17
4	12	16	19	57	170	23	16	12	13	20	20	15
5	12	15	16	25	212	22	15	13	12	19	19	14
6	12	15	14	20	20	33	15	18	12	19	17	23
7	12	15	14	19	23	25	16	28	13	19	16	17
8	12	15	14	18	15	23	15	19	12	19	15	16
9	12	16	14	17	19	21	14	11	12	19	16	15
10	14	16	15	16	17	21	14	10	12	19	15	15
11	13	17	14	16	18	21	14	11	12	22	16	25
12	22	17	23	16	48	30	14	14	11	17	16	15
13	19	16	14	19	18	31	16	11	11	17	16	15
14	19	18	15	19	13	23	15	11	12	16	15	15
15	16	16	16	15	13	26	13	10	12	16	15	16
16	15	15	19	14	12	22	14	10	13	15	14	15
17	14	15	15	13	119	20	14	10	14	15	14	14
18	14	16	18	13	58	20	14	10	13	15	14	14
19	14	16	17	13	70	22	15	10	14	15	14	14
20	15	20	16	13	62	19	14	10	12	15	26	40
21	17	16	17	14	25	19	14	9.5	17	14	20	16
22	15	16	30	13	186	18	14	9.5	14	14	35	15
23	16	14	19	13	46	18	14	9.0	14	16	17	15
24	16	14	17	13	33	18	14	10	13	39	16	16
25	16	14	16	13	30	17	13	15	90	18	16	18
26	16	14	15	13	34	17	13	10	358	17	15	18
27	16	14	16	14	33	16	14	10	56	16	15	16
28	16	15	15	16	27	16	13	10	43	20	14	16
29	17	17	15	15	-----	16	13	9.5	34	19	14	16
30	19	16	15	14	-----	17	12	9.0	26	19	14	18
31	16	-----	15	13	-----	18	-----	9.0	-----	17	14	-----
TOTAL	463	472	522	520	1,373	664	440	364.5	907.5	591	520	507
MEAN	14.5	15.7	16.8	16.8	49.0	21.4	14.7	11.8	30.3	19.1	16.8	16.9
MAX	22	20	30	57	212	33	20	28	358	39	35	40
MIN	12	14	14	12	12	16	12	9.0	9.5	14	14	14

CAL YR 1970 TOTAL 8,419.0 MEAN 23.1 MAX 366 MIN 11
WTR YR 1971 TOTAL 7,344.0 MEAN 20.1 MAX 358 MIN 9.0

PEAK DISCHARGE (BASE, 250 CFS REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0315	7.56	628	2-22	1000	7.61	643
2-17	1630	6.24	316	6-26	0200	9.63	1,300

GREAT MIAMI RIVER BASIN

03267800 Mad River at Eagle City, Ohio

LOCATION.—Lat 39°58'36", long 83°49'21", in center sec. 2, R.10, T.4, Clark County, on right bank at downstream side of bridge on Eagle City Road, 0.2 mile downstream from Moore Run, 0.7 mile east of Eagle City, 2.4 miles south of Tremont City, and 3.6 miles upstream from Buck Creek.

DRAINAGE AREA.—307 sq mi.

PERIOD OF RECORD.—October 1965 to September 1971 (discontinued).

GAGE.—Water-stage recorder. Datum of gage is 910.25 feet above mean sea level.

AVERAGE DISCHARGE.—6 years, 260 cfs.

EXTREMES.—Current year: Maximum discharge, about 9,700 cfs June 26, computed from hydrograph defined at Station 03267900; minimum daily 82 cfs Aug. 17, 18.

Period of record: Maximum discharge, about 9,700 cfs June 26, 1971, computed from hydrograph defined at Station 03267900. Flood of March 1913 reached a stage of 20.4 ft from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 17.4 ft.

REMARKS.—Records poor. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, upstream and downstream from the station. Recharge to the well field is largely by induced infiltration from the river. The pumpage averaged 25.6 cfs in 1971 and is returned as sewage 1.4 miles upstream from the station near Springfield. Part of the diversion is from the river upstream from the station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WRD Ohio 1970: 1969

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	106	104	120	110	410	250	159	146	310	111	93
2	115	113	104	120	150	370	270	162	146	240	113	93
3	115	111	111	110	430	350	260	167	151	200	116	102
4	115	111	108	497	840	240	224	164	140	190	120	102
5	115	111	104	303	2,470	290	224	162	133	180	113	102
6	110	108	104	196	518	355	214	205	128	170	106	378
7	110	116	106	167	322	530	208	224	151	160	104	311
8	115	111	105	140	240	354	202	415	150	159	99	153
9	115	118	105	140	150	304	166	280	140	156	102	138
10	120	116	105	140	190	307	190	236	140	156	99	116
11	115	116	110	130	155	257	184	224	140	176	102	202
12	130	116	140	130	344	446	184	290	140	156	93	170
13	150	116	180	130	341	670	167	263	150	148	88	133
14	146	118	140	170	243	530	106	230	150	143	86	118
15	153	116	140	150	217	650	181	211	150	140	86	108
16	143	113	140	120	156	535	176	202	140	135	88	104
17	138	113	150	110	1,100	410	181	199	140	133	82	102
18	135	116	150	110	1,000	354	176	153	140	130	82	99
19	133	116	140	100	1,100	368	170	190	140	130	84	99
20	138	119	120	110	1,700	354	164	199	140	125	150	140
21	146	113	120	115	560	322	167	181	150	120	135	118
22	133	118	190	115	3,000	350	164	170	140	118	236	113
23	130	111	240	110	1,300	314	162	167	140	118	140	113
24	120	106	180	110	590	310	162	167	140	162	116	102
25	119	111	150	110	460	290	159	193	320	143	106	99
26	118	111	130	110	610	290	151	190	3,300	135	104	146
27	118	116	140	100	720	270	156	181	570	130	102	146
28	113	113	130	130	500	270	173	176	360	130	99	133
29	113	113	130	130	-----	260	164	153	280	140	97	123
30	113	113	130	100	-----	250	164	148	240	123	118	167
31	108	-----	120	100	-----	240	-----	143	-----	118	93	-----
TOTAL	3,856	3,404	4,126	4,423	15,660	11,300	5,659	6,244	8,495	4,774	3,370	4,123
MEAN	124	113	133	143	702	365	189	201	283	154	109	137
MAX	153	118	240	497	3,000	670	270	415	3,300	310	236	378
MIN	108	106	104	100	110	240	151	143	128	118	82	93
CAL YR 1970	TOTAL 107,853	MEAN 295	MAX 4,170	MIN 100								
WTR YR 1971	TOTAL 79,434	MEAN 218	MAX 3,300	MIN 82								

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	Unknown	-	About 3,800	2-22	1200	-	About 4,900
2-17	1000	-	About 3,000	6-26	0200	-	About 9,700
2-20	0100	-	About 2,600				

03267900 Mad River at St. Paris Pike at Eagle City, Ohio
(Formerly published as Mad River (St. Paris Pike) at Eagle City)

LOCATION.--Lat 39°57'51", long 83°49'54", in W 1/2 sec. 1, R.10, T.4, Clark County, on left bank at downstream side of bridge on St. Paris pike, 0.8 mile southeast of Eagle City, 1.1 miles downstream from Moore Run, 3.1 miles upstream from Buck Creek, and 3.3 miles south of Tremont City.

DRAINAGE AREA.--310 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft above mean sea level.

AVERAGE DISCHARGE.--6 years, 262 cfs.

EXTREMES.--Current year: Maximum discharge, 9,700 cfs June 26 (gage height, 16.00 ft), from rating curve extended above 2,200 cfs; minimum, 92 cfs Sept. 5.

Period of record: Maximum discharge, 9,700 cfs June 26, 1971 (gage height 16.00 ft), from rating curve extended above 2,200 cfs; minimum, 91 cfs Sept. 19, 1966.

Flood of March 1913 reached a stage of 19.8 ft, from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 15.7 ft.

REMARKS.--Records good. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, just upstream from station. Recharge to the well field is largely by induced filtration from Mad River and Moore Run. See REMARKS for Station 03267800. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	115	106	120	110	410	246	156	137	313	124	102
2	115	126	106	117	150	373	273	156	141	242	124	102
3	115	128	110	113	429	351	256	160	146	201	128	110
4	113	124	119	402	1,360	320	237	154	141	192	132	107
5	113	122	113	314	2,650	306	232	154	133	184	126	100
6	111	117	108	170	472	353	225	186	132	168	121	358
7	111	115	106	150	258	514	221	212	152	160	114	295
8	113	113	106	140	216	365	216	387	152	159	112	152
9	113	115	104	140	190	314	209	266	142	158	112	123
10	119	119	104	137	150	323	205	214	141	160	112	110
11	113	117	108	133	176	309	199	197	142	174	114	192
12	129	115	142	131	255	443	197	266	141	160	107	160
13	193	113	175	128	323	652	199	239	148	150	105	130
14	144	117	144	170	214	958	201	205	146	146	105	117
15	142	119	135	153	150	608	190	188	146	142	102	108
16	129	115	137	120	174	532	186	178	142	137	100	102
17	128	115	153	117	1,110	410	186	176	144	135	99	99
18	124	113	148	110	1,040	365	182	168	144	133	97	97
19	122	113	140	100	1,080	379	180	166	141	135	99	96
20	129	124	129	110	1,650	367	178	178	144	133	149	142
21	135	122	125	115	560	334	176	158	152	128	132	137
22	128	120	190	115	2,980	353	172	150	144	124	230	115
23	126	113	242	111	1,280	331	170	146	142	128	154	108
24	122	100	180	110	592	306	170	146	144	180	130	105
25	119	113	150	110	462	288	166	178	316	156	123	105
26	119	110	130	110	612	283	162	170	3,300	144	121	137
27	120	110	144	98	720	273	164	158	570	139	117	139
28	120	106	133	133	467	268	168	152	356	139	114	126
29	122	111	129	129	-----	258	162	148	278	142	108	117
30	128	110	126	102	-----	251	158	142	242	133	107	137
31	119	-----	124	102	-----	242	-----	139	-----	130	104	-----
TOTAL	3,809	3,470	4,170	4,303	20,100	11,389	5,886	5,693	8,499	4,925	3,721	4,028
MEAN	123	116	135	139	714	367	196	184	283	159	120	134
MAX	123	128	242	402	2,980	652	273	387	3,300	313	230	358
MIN	111	100	104	98	110	242	158	139	132	124	97	96
CAL YR 1970	TOTAL 106,326	MEAN 291	MAX 4,240	MIN 100								
WTR YR 1971	TOTAL 79,993	MEAN 219	MAX 3,300	MIN 96								

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0800	11.13	3,900	2-22	1300	12.22	4,990
2-17	2000	10.32	3,170	6-26	0330	16.00	9,700
2-20	0200	9.75	2,700				

GREAT MIAMI RIVER BASIN

03267950 Buck Creek near New Moorefield, Ohio

LOCATION.—Lat 40°00'38", long 83°41'56", in SE 1/4 sec. 5, R.10, T.5, Clark County, on right bank at downstream side of bridge on State Highway 4, 2000 ft upstream from East Fork, 1.7 miles northeast of New Moorefield, and 2.6 miles downstream from Dugan Ditch.

DRAINAGE AREA.—30.5 sq mi.

PERIOD OF RECORD.—April 1967 to current year.

GAGE.—Water-stage recorder. Datum of gage 1,025.10 ft above mean sea level. Prior to May 23, 1967 nonrecording gage at same site and datum.

EXTREMES.—Current year: Maximum discharge, 822 cfs Feb. 22 (gage height, 8.04 ft); minimum daily, 8.2 cfs Aug. 17, 18, 19.
Period of Record: Maximum discharge, 1,190 cfs May 25, 1970 (gage height, 9.09 ft) from rating curve extended above 140 cfs; minimum, 8.2 cfs Feb. 17, 1968 (gage height 3.68 ft), result of freezeup.

REMARKS.—Records fair. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	11	14	14	11	33	22	12	12	15	10	8.4
2	15	12	14	14	11	31	21	12	12	12	10	8.4
3	14	12	14	14	11	29	20	12	12	11	14	8.4
4	14	12	14	34	205	28	20	12	12	11	12	8.7
5	14	12	14	21	354	27	20	12	11	11	11	8.4
6	14	12	13	17	36	32	19	15	11	11	10	11
7	14	11	13	15	28	36	18	15	11	11	10	11
8	14	11	13	15	21	29	18	18	11	11	9.6	9.3
9	13	11	13	14	18	27	17	16	10	11	9.2	8.8
10	14	12	13	14	16	27	17	15	10	12	9.2	8.7
11	13	12	14	13	14	26	17	14	10	12	10	9.7
12	16	12	16	13	26	36	16	15	10	11	9.2	9.0
13	16	12	16	14	32	42	17	15	10	11	9.2	8.9
14	15	12	15	16	28	32	17	15	10	10	8.8	8.7
15	14	12	15	13	21	33	16	14	9.6	10	8.8	8.7
16	13	11	15	12	20	29	16	13	9.6	10	8.4	8.7
17	13	13	16	12	165	26	16	13	9.2	10	8.2	8.9
18	13	14	16	11	94	26	15	13	8.8	9.6	8.2	9.0
19	13	14	16	11	142	27	15	13	9.2	10	8.2	8.7
20	13	15	15	11	165	26	15	13	9.2	9.6	16	15
21	14	14	15	11	47	26	14	13	10	9.2	12	13
22	13	14	18	11	398	25	14	12	8.8	9.2	13	11
23	12	13	18	11	66	25	14	12	8.8	9.2	10	10
24	12	13	16	11	41	23	13	12	8.8	13	9.2	10
25	12	13	15	11	37	23	13	14	11	11	9.2	10
26	12	13	14	11	47	23	13	13	144	11	8.8	11
27	12	13	15	11	45	23	13	12	24	10	8.8	11
28	11	13	14	11	35	22	12	12	15	11	8.4	10
29	11	14	14	11	-----	21	12	12	15	11	8.4	10
30	11	14	14	11	-----	21	12	12	12	10	8.8	10
31	11	-----	14	11	-----	21	-----	12	-----	10	8.4	-----
TOTAL	411	377	456	419	2,136	857	482	413	465.0	333.8	305.0	292.8
MEAN	13.3	12.6	14.7	13.5	76.3	27.6	16.1	13.3	15.5	10.8	9.84	9.74
MAX	16	15	18	34	398	42	22	18	144	15	16	15
MIN	11	11	13	11	11	21	12	12	8.8	9.2	8.2	8.4
CFSM	.44	.41	.48	.44	2.50	.90	.53	.44	.51	.35	.32	.32
IN.	.50	.46	.56	.51	2.61	1.05	.59	.50	.57	.41	.37	.36
CAL YR 1970	TOTAL 9,996.0 MEAN 27.4 MAX 450 MIN 11 CFSM .90 IN 12.19											
WTR YR 1971	TOTAL 6,947.6 MEAN 19.0 MAX 398 MIN 8.2 CFSM .62 IN 8.47											

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	0530	7.62	696	2-22	1045	8.04	822
2-20	0100	6.37	384	6-26	0330	6.64	424

GREAT MIAMI RIVER BASIN

161

03267960 East Fork Buck Creek near New Moorefield, Ohio

LOCATION.--Lat 40°00'22", long 83°41'37", in SE 1/4 sec. 5, R.10, T.5, Clark County, on right bank at downstream side of bridge on Baldwin Lane, 1,500 ft upstream from mouth, 0.6 mile downstream from unnamed left bank tributary, and 1.6 miles northeast of New Moorefield.

DRAINAGE AREA.--28.7 sq mi.

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage 1,022.71 ft above mean sea level. Prior to May 23, 1967, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 780 cfs June 26 (gage height, 8.68 ft); minimum, 6.2 cfs June 13, 14, 15, 21, July 19, 20, 21, 22, Aug. 1, 2, 3, 5, 6, 7, 11.

Period of record: Maximum discharge, 1,180 cfs Aug. 9, 1969 (gage height, 9.98 ft), from rating curve extended above 290 cfs; minimum, 6.2 cfs June 13, 14, 15, 21, July 19, 20, 21, 22, Aug. 1, 2, 3, 5, 6, 7, 11, 1971.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	14	13	9.4	34	21	15	13	1.4	13	9.5
2	11	13	13	13	9.2	31	22	15	14	33	13	10
3	11	12	13	13	8.5	24	20	15	13	23	14	12
4	11	12	15	50	206	26	19	15	13	2	14	11
5	11	12	14	21	319	25	19	15	12	18	12	11
6	10	12	14	16	32	59	18	18	12	14	12	14
7	11	11	14	14	23	66	18	18	12	16	12	14
8	11	11	13	13	18	35	18	62	12	15	12	12
9	11	12	13	12	18	29	14	32	12	15	11	11
10	12	12	13	12	15	29	18	24	12	15	11	11
11	12	11	13	12	16	29	17	21	12	17	12	12
12	15	12	19	11	37	69	17	20	12	15	11	11
13	18	11	18	12	24	75	17	19	12	15	11	11
14	15	12	16	18	21	52	18	18	13	14	11	10
15	14	13	15	13	17	59	17	18	12	14	10	9.9
16	14	12	17	11	16	45	17	17	12	13	10	10
17	14	12	20	11	188	35	17	17	11	13	9.5	10
18	14	12	18	11	109	32	16	18	11	12	9.5	10
19	13	12	17	10	154	34	16	15	11	12	9.5	10
20	14	14	16	10	140	33	16	15	11	12	16	15
21	15	14	16	9.8	41	29	16	15	12	12	12	13
22	14	14	24	10	342	29	16	15	12	12	13	12
23	14	13	23	9.9	77	27	15	15	11	12	11	11
24	13	13	19	10	45	26	15	15	11	26	10	11
25	13	13	17	9.8	36	24	15	17	12	17	10	11
26	13	13	15	9.4	56	24	15	15	256	17	9.5	13
27	12	13	14	9.6	61	23	15	15	39	15	9.5	12
28	12	13	15	9.4	40	23	15	15	27	15	9.0	11
29	12	14	14	9.3	-----	22	15	14	24	15	9.0	12
30	13	14	14	9.4	-----	21	15	14	21	15	10	14
31	12	-----	14	9.4	-----	20	-----	13	-----	14	9.5	-----
TOTAL	396	374	490	402.0	2,078.1	1,093	511	568	667	584	346.0	344.4
MEAN	12.8	12.5	15.8	13.0	74.2	35.3	17.0	18.3	22.2	18.8	11.2	11.5
MAX	18	14	24	50	342	75	22	62	256	104	16	15
MIN	10	11	13	9.3	8.5	20	15	13	11	12	9.0	9.5
CFSM	.45	.44	.55	.45	2.59	1.23	.59	.64	.77	.66	.39	.40
IN.	.51	.48	.64	.52	2.69	1.42	.68	.74	.86	.76	.45	.45

CAL YR 1970 TOTAL 11,925.6 MEAN 32.7 MAX 750 MIN 9.6 CFSM 1.14 IN 15.46
WTR YR 1971 TOTAL 7,653.5 MEAN 21.5 MAX 342 MIN 8.5 CFSM .75 IN 10.18

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-9	0000	8.22	674	2-22	1230	8.49	732
2-17	1915	7.07	604	6-26	0500	8.68	760
2-20	0115	6.69	568	7-1	1500	7.59	548

GREAT MIAMI RIVER BASIN

03269500 Mad River near Springfield, Ohio

LOCATION.--Lat 39°55'23", long 83°52'13", in NW 1/4 sec. 16, R.9, T.4, Clark County, on right bank 150 ft downstream from Rock Run, 300 ft downstream from bridge on Lower Valley Pike, 2 miles downstream from Buck Creek, and 3 miles west of Springfield.

DRAINAGE AREA.--490 sq mi.

PERIOD OF RECORD.--January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft above mean sea level, adjustment of 1912. Jan. 1, 1904, to Mar. 31, 1906, nonrecording gage at site 0.3 mile downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 miles upstream at datum 6.39 ft higher. Mar. 1, 1924, to July 31, 1925, nonrecording gage at site 300 ft upstream at same datum.

AVERAGE DISCHARGE.--58 years (1904-5, 1914-71), 475 cfs (13.17 inches per year).

EXTREMES.--Current year: Maximum discharge, 9,680 cfs June 26 (gage height, 10.85 ft); minimum, 151 cfs Aug. 20.
Period of record: Maximum discharge, 30,500 cfs Jan. 21, 1959 (gage height, 15.76 ft), from rating curve extended above 14,000 cfs on basis of slope-area and contracted-opening measurements of peak flow; minimum, 30 cfs Sept. 15, 1904.
Flood of March 25, 1913 reached a stage of 16.9 ft, present datum (discharge, 55,400 cfs, computed by Miami Conservancy District).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 603: 1924. WSP 823: 1929(N). WSP 1305: 1914(N), 1916-17(N), 1922-23(N), 1925(N). WSP 1625: 1924(N). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	208	234	229	166	624	365	261	220	516	200	172
2	208	242	224	224	176	556	402	265	234	446	200	169
3	204	234	247	238	204	514	360	273	231	335	210	308
4	196	238	256	828	1,760	458	340	241	228	295	231	189
5	200	224	234	535	4,220	434	335	257	220	277	210	166
6	196	220	220	348	802	623	330	402	210	269	200	501
7	196	212	224	310	493	972	320	444	234	257	189	463
8	196	204	224	290	359	510	320	937	231	246	178	253
9	200	216	220	280	245	488	310	482	220	242	182	214
10	216	224	220	270	285	507	305	380	217	245	182	203
11	200	220	220	260	280	464	295	335	210	277	196	312
12	285	220	320	256	481	674	300	407	206	245	175	253
13	310	220	310	270	588	1,190	320	375	210	234	169	228
14	256	229	270	242	320	873	320	330	214	228	166	210
15	242	234	256	300	305	981	300	300	203	220	160	200
16	224	220	285	256	275	864	295	250	196	217	166	192
17	216	220	315	252	1,310	634	285	285	192	210	163	186
18	212	224	295	229	2,050	545	281	273	189	206	163	182
19	216	224	270	234	1,770	602	277	277	186	210	163	175
20	247	275	252	229	2,540	563	273	290	175	210	210	396
21	252	238	260	229	545	488	265	261	214	206	206	261
22	229	220	424	224	4,180	514	273	245	186	203	324	224
23	224	224	406	220	2,270	476	265	238	186	220	228	210
24	216	212	332	220	972	440	261	245	182	384	200	200
25	212	224	300	220	722	412	257	346	713	253	200	212
26	212	220	265	216	572	402	261	273	5,910	241	200	242
27	220	220	270	162	1,220	380	269	253	1,070	220	192	234
28	216	216	260	212	766	370	285	245	594	249	186	224
29	224	247	252	204	-----	370	265	238	446	242	178	206
30	247	238	247	224	-----	360	265	228	385	220	178	234
31	220	-----	242	166	-----	350	-----	224	-----	210	175	-----
TOTAL	6,904	6,794	8,354	6,477	30,846	17,782	9,007	9,826	14,120	8,033	5,980	7,219
MEAN	223	226	269	273	1,102	574	300	317	471	259	193	241
MAX	310	275	424	828	4,220	1,190	402	837	5,910	516	324	501
MIN	196	204	220	162	166	350	257	224	175	203	160	166
CFSM	.46	.46	.55	.56	2.25	1.17	.61	.65	.96	.53	.39	.49
IN.	.52	.52	.63	.64	2.34	1.35	.68	.75	1.07	.61	.45	.55
CAL YR 1970	TOTAL 181,898	MEAN 498	MAX 7,800	MIN 166	CFSM 1.02	IN 13.81						
WTR YR 1971	TOTAL 139,342	MEAN 365	MAX 5,910	MIN 160	CFSM .74	IN 10.12						

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	1000	8.39	5,620	2-22	1730	9.07	6,430
2-17	2230	7.13	4,460	6-26	0700	10.85	9,680

03270000 Mad River near Dayton, Ohio

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec. 7, R.6, T.2, Greene County on left bank in retarding basin 300 ft upstream from Huffman Dam, 2.3 miles downstream from Mad Run, and 6.2 miles northeast of Dayton.

DRAINAGE AREA.--635 sq mi.

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 777.05 ft above mean sea level, adjustment of 1912. Jan. 21, 1959 to Dec. 14, 1967, at site 900 ft downstream, at datum 77.10 ft lower. See WSP 1725 for history of changes prior to Jan. 21, 1959.

AVERAGE DISCHARGE.--57 years, 609 cfs (13.03 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,430 cfs June 26 (gage height, 14.39 ft); minimum, 181 cfs Sept. 1.
Period of record: Maximum discharge, 21,200 cfs Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft Feb. 26, 1929 at site and datum then in use; minimum discharge, 91 cfs Aug. 6, 9, 1934, but may have been less during period 1921-24.
Flood of Mar. 25, 1913 reached a stage of 14.0 ft, original site and datum (discharge, 75,700 cfs, computed by Miami Conservancy District).

REMARKS.--Records good. Flood flows affected by backwater from Huffman retarding dam beginning in 1921. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M), 1930-32(M). WSP 1908: 1922(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	238	250	240	200	888	468	310	363	524	254	187
2	217	282	244	240	190	796	556	320	328	736	244	190
3	211	278	254	230	190	740	512	340	324	564	254	245
4	208	261	303	764	1,770	668	468	310	313	432	313	313
5	205	254	268	730	4,700	620	452	299	299	388	292	214
6	211	241	250	459	1,410	708	452	608	282	364	254	428
7	211	235	241	360	715	1,310	436	576	282	340	235	1,020
8	211	229	238	330	450	888	420	1,240	299	324	223	408
9	217	229	235	320	400	708	400	820	278	317	220	299
10	226	235	232	310	360	700	392	604	264	313	223	254
11	223	235	229	300	340	708	376	508	254	340	244	436
12	254	232	328	308	596	788	368	552	250	332	223	428
13	380	232	344	309	925	1,550	376	568	241	299	208	317
14	296	235	310	382	430	1,190	412	488	247	289	202	282
15	275	257	292	378	370	1,190	380	436	241	282	199	254
16	254	241	306	315	350	1,230	364	416	223	282	196	238
17	241	235	352	290	1,140	888	356	416	211	275	199	232
18	238	235	336	270	2,990	764	348	388	211	268	193	223
19	235	235	313	260	1,960	780	344	372	211	264	190	217
20	244	275	292	250	3,250	772	344	448	202	268	199	384
21	278	271	289	260	1,390	692	344	392	250	264	261	396
22	257	250	456	267	3,500	672	340	364	223	257	303	299
23	247	241	472	264	4,260	664	336	348	208	250	303	268
24	241	229	412	250	1,440	616	332	352	205	504	238	250
25	238	235	340	230	1,010	584	328	528	202	384	217	247
26	235	235	300	220	1,110	556	317	448	4,940	289	217	299
27	238	235	280	200	1,700	536	336	408	3,180	292	214	292
28	235	235	270	250	1,160	516	368	364	1,050	275	205	278
29	241	250	260	230	-----	504	332	328	728	364	199	261
30	268	268	250	220	-----	484	320	317	596	289	193	244
31	254	-----	250	210	-----	468	-----	306	-----	282	193	-----
TOTAL	7,512	7,343	9,196	9,646	38,326	24,178	11,577	14,214	16,845	10,691	7,104	9,443
MEAN	242	245	297	311	1,349	780	386	459	542	345	229	315
MAX	380	282	472	764	4,700	1,550	556	1,280	4,940	736	313	1,020
MIN	205	229	229	200	190	468	317	299	202	250	190	187
CFSM	.38	.39	.47	.49	2.16	1.23	.61	.72	.69	.54	.36	.50
IN.	.44	.43	.54	.57	2.25	1.42	.68	.83	.99	.63	.42	.55

CAL YR 1970 TOTAL 220,694 MEAN 605 MAX 6,780 MIN 205 CFSM .95 IN 12.93
WTR YR 1971 TOTAL 166,075 MEAN 455 MAX 4,940 MIN 187 CFSM .72 IN 9.73

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-5	1900	11.17	5,140	2-23	0600	12.46	6,040
2-18	0430	10.01	4,330	6-26	2300	14.39	7,430

GREAT MIAMI RIVER BASIN

03270500 Great Miami River at Dayton, Ohio

LOCATION.—Lat 39°45'55", long 84°11'51", in sec. 10, R.7, T.1, Montgomery County, on left bank 1,000 ft downstream from Main Street Bridge in Dayton, 0.7 mile upstream from Wolf Creek, and 0.6 mile downstream from Mad River.

DRAINAGE AREA.—2,511 sq mi.

PERIOD OF RECORD.—April to September 1905, January to September 1906, January 1907 to December 1909 (gauge heights only), April 1913 to current year. Monthly discharge only for October 1919 to September 1921, published in WSP 1305. Gauge-height records collected at Main Street Bridge since January 1892 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Dayton.

GAGE.—Water-stage recorder. Datum of gage is 700.00 ft above mean sea level, adjustment of 1912. Prior to Oct. 1, 1921 nonrecording gage at Main Street Bridge at datum 23.73 ft higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft higher.

AVERAGE DISCHARGE.—42 years (1905-71), 2,033 cfs.

EXTREMES.—Current year: Maximum discharge, 22,600 cfs Feb. 23 (gauge height, 29.52 ft); minimum, 185 cfs Feb. 2. Period of record: Maximum discharge, 60,900 cfs Jan. 22, 1959 (gauge height, 35.45 ft in gage well, from graph based on gage readings; 36.0 ft, from outside floodmarks); minimum, 78 cfs Sept. 26, 1941. Flood of Mar. 26, 1913 reached a stage of 29.0 ft, site and datum then in use (discharge, 250,000 cfs, computed by Miami Conservancy District).

REMARKS.—Records good. Flood flow regulated by four retarding basins above station beginning in 1920 on Mad River 6.5 miles upstream on Stillwater River 10.5 miles upstream, on Great Miami River 11.5 miles upstream, and on Loric Creek 40 miles upstream. Also see REMARKS for Station No. 03261500 and 03261950. Water is diverted 6 miles above station for use in Dayton; most of return flow from diversions bypasses station in Dayton sewer systems. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.—Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS.—WSP 1305: 1917. WSP 1906: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	339	421	448	286	4,670	1,190	570	662	1,520	424	221
2	272	490	404	399	233	3,560	1,380	580	653	1,930	412	332
3	263	435	441	434	253	2,950	1,320	659	658	1,330	442	396
4	241	401	524	1,550	1,300	2,470	1,260	610	982	1,060	561	548
5	241	389	461	3,020	11,000	2,100	1,170	577	1,110	807	458	297
6	253	383	438	2,270	8,780	2,050	1,090	1,550	840	723	395	580
7	246	358	422	1,350	3,920	3,220	1,100	1,530	806	666	362	1,410
8	244	335	410	1,080	2,140	3,530	1,080	3,870	970	608	336	661
9	252	337	379	900	1,240	2,510	944	4,710	737	713	336	573
10	275	356	345	800	1,160	2,230	846	3,500	639	696	325	425
11	256	355	345	700	1,200	2,240	794	2,400	574	642	344	557
12	376	356	544	632	1,480	2,570	782	2,380	538	615	321	617
13	571	353	539	607	3,160	5,880	769	3,170	470	657	305	456
14	486	376	651	728	2,710	6,490	823	2,390	505	678	305	368
15	459	389	657	798	1,810	5,840	852	1,640	473	578	283	340
16	391	375	656	752	1,270	7,110	847	1,320	456	550	293	305
17	339	380	687	656	2,910	5,310	775	1,180	421	463	265	283
18	318	389	611	588	11,000	3,860	731	1,040	387	420	227	268
19	306	491	613	549	10,100	3,250	708	1,060	355	434	222	256
20	342	672	548	525	14,300	3,210	688	1,180	324	430	231	560
21	397	612	605	553	11,200	3,130	662	931	462	414	305	606
22	352	583	990	490	13,800	2,780	638	843	343	395	499	522
23	335	570	1,090	430	20,100	2,590	626	773	333	407	444	601
24	316	534	1,380	410	12,600	2,290	627	794	337	1,070	316	457
25	309	522	1,150	417	7,240	1,980	589	1,150	331	749	267	436
26	309	454	862	427	5,460	1,770	601	1,210	9,420	625	284	526
27	306	493	721	366	9,110	1,570	729	1,150	15,300	636	252	489
28	303	504	730	377	7,210	1,480	763	943	5,200	613	228	595
29	335	546	621	397	-----	1,390	601	821	2,840	794	213	623
30	376	502	546	441	-----	1,300	570	738	1,890	547	228	507
31	366	-----	448	359	-----	1,210	-----	690	-----	480	223	-----
TOTAL	10,159	13,279	19,289	23,483	166,972	96,490	25,555	45,959	49,016	22,248	10,106	14,815
MEAN	328	443	622	758	5,963	3,113	852	1,483	1,634	718	326	494
MAX	571	672	1,380	3,020	20,100	7,110	1,380	4,710	15,300	1,930	561	1,410
MIN	241	335	345	359	233	1,210	570	570	324	395	213	221
CAL YR 1970	TOTAL 698,947			MEAN 1,915		MAX 25,000		MIN 230				
WTR YR 1971	TOTAL 497,371			MEAN 1,363		MAX 20,100		MIN 213				

03270800 Wolf Creek at Trotwood, Ohio

LOCATION.—Lat 39°47'39", long 84°18'36", Montgomery County, on right bank 350 ft downstream from Union Road Bridge, 700 ft downstream from unnamed right bank tributary, 0.2 mile south of Trotwood, and 0.3 mile upstream from confluence with North Branch.

DRAINAGE AREA.—22.7 sq mi.

PERIOD OF RECORD.—October 1962 to current year.

GAGE.—Water-stage recorder. Datum of gage is 826.28 ft above mean sea level.

AVERAGE DISCHARGE.—9 years, 18.3 cfs (10.95 inches per year).

EXTREMES.—Current year: Maximum discharge during year, 1,040 cfs Feb. 22 (gage height, 3.98 ft); minimum, 0.02 cfs Sept. 16.

Period of record: Maximum discharge, 2,970 cfs May 24, 1968 (gage height, 6.47 ft); no flow all or part of each day Sept. 8-17, Oct. 3, 1964, Sept. 16-19, 1967.

Maximum discharge during flood in January 1959, about 3,900 cfs (gage height, 8.0 ft), computed by Miami Conservancy District on basis of estimate of peak flow based on contracted-opening measurement at site 1.1 miles downstream with drainage area of 48.2 sq mi, adjusted to gage site by 0.8 power of the drainage-area ratio. Flood of March 1913 reached a stage of 9.4 ft (computed by Miami Conservancy District).

REMARKS.—Records fair. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.—Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	1.2	4.1	4.0	3.8	32	11	3.7	4.9	1.2	1.0	.12
2	.34	3.0	3.4	4.0	3.7	26	18	4.5	6.3	1.6	.86	.66
3	.47	4.2	3.7	5.0	3.7	22	13	5.8	4.5	1.0	.46	2.0
4	.36	1.8	7.6	115	200	18	9.5	4.9	4.1	.86	18	2.2
5	.36	1.4	5.4	38	150	16	8.3	4.9	3.7	.72	6.4	.36
6	.36	1.4	4.4	20	20	52	8.3	147	3.7	.72	3.0	1.9
7	.36	1.4	3.7	13	11	62	7.8	146	3.7	.57	1.8	1.0
8	.36	1.2	3.4	10	9.0	29	6.8	163	4.1	.47	1.2	.26
9	.72	1.4	3.4	8.5	8.4	19	6.3	56	3.0	3.9	1.0	.12
10	2.2	2.4	3.0	7.2	8.0	20	5.4	29	3.0	6.0	.86	.08
11	1.8	2.4	3.4	6.4	7.6	25	4.5	21	3.0	4.3	.72	.08
12	6.4	1.4	12	7.2	55	78	4.9	20	5.0	1.4	.72	.12
13	5.8	1.2	5.5	6.8	20	83	5.8	15	4.1	1.0	.47	.12
14	5.0	2.1	6.3	16	11	90	6.3	11	3.0	.72	.57	.08
15	2.0	4.1	4.5	9.5	5.8	65	4.5	10	2.7	.86	.57	.08
16	1.0	3.4	13	8.0	5.2	39	4.5	10	2.4	1.0	.47	.04
17	.86	2.4	25	7.2	242	26	4.5	11	2.1	.86	.47	.04
18	.86	2.1	13	6.4	75	22	4.1	10	2.1	.57	.36	.08
19	.57	2.1	9.5	6.2	105	28	3.7	44	1.8	.72	.36	.18
20	3.0	11	6.8	6.0	121	26	3.4	71	2.4	.72	.36	5.2
21	5.3	7.0	7.3	5.8	36	21	3.7	22	5.2	.72	.36	1.4
22	1.6	3.6	72	5.6	474	19	4.5	14	2.4	.57	.47	.47
23	1.2	2.8	32	5.4	57	16	4.1	11	1.6	.47	.47	.26
24	.86	2.6	16	5.2	40	14	4.1	12	1.6	14	.47	.26
25	.72	2.4	12	5.0	26	12	3.7	40	1.6	3.4	.47	.62
26	1.0	2.3	9.5	4.7	96	12	3.0	17	3.1	1.6	.57	2.6
27	.86	2.2	7.5	4.5	103	10	4.6	11	1.6	1.2	.57	.86
28	1.0	2.1	6.2	4.4	44	10	8.4	9.5	1.2	1.9	.57	.36
29	1.2	3.2	5.4	4.2	-----	8.9	4.5	7.8	1.0	7.7	.36	.26
30	2.0	6.3	4.8	4.0	-----	7.8	4.1	6.8	1.0	2.4	.36	.36
31	1.6	-----	4.4	3.9	-----	6.8	-----	5.8	-----	1.6	.36	-----
TOTAL	50.54	86.1	322.2	357.3	1,981.2	875.5	186.1	944.7	89.9	64.75	90.22	22.17
MEAN	1.63	2.87	10.4	11.5	70.8	28.2	6.20	30.5	3.00	2.09	2.91	.74
MAX	6.4	11	72	115	474	83	18	163	6.3	14	46	5.2
MIN	.36	1.2	3.0	3.9	3.7	6.8	3.0	3.7	1.0	.47	.36	.04
CFSM	.07	.13	.46	.51	3.12	1.24	.27	1.34	.13	.09	.13	.03
IN.	.08	.14	.53	.59	3.25	1.43	.30	1.55	.15	.11	.15	.04

CAL YR 1970 TOTAL 5,858.21 MEAN 16.0 MAX 737 MIN .36 CFSM .70 IN 9.60
WTP YR 1971 TOTAL 5,070.68 MEAN 13.9 MAX 474 MIN .04 CFSM .61 IN 8.31

PEAK DISCHARGE (BASE, 700 CFS REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-17	1630	3.31	705	2-22	0830	3.98	1,040

03271500 Great Miami River at Miamisburg, Ohio

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6,T.1, Montgomery County, on left bank 600 ft downstream from bridge on State Highway 725 at Miamisburg, 0.3 mile downstream from Bear Creek, and 3.2 miles upstream from Crains Run.

DRAINAGE AREA.--2,711 sq mi.

PERIOD OF RECORD.--March 1916 to September 1920 (published as Miami River at Franklin 1916-17), August 1924 to September 1935 (published as Miami River near Miamisburg), October 1952 to current year (published as Miami River at Miamisburg 1952-62). Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft above mean sea level, adjustment of 1912. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 miles downstream at different datum. Aug. 29 to Sept. 16, 1924, nonrecording gage and Sept. 17, 1924, to Sept. 30, 1935, water-stage recorder, at site 2.2 miles downstream at datum 677.06 ft above mean sea level.

AVERAGE DISCHARGE.--34 years, 2,279 cfs (11.42 inches per year).

EXTREMES.--Current year: Maximum discharge during year, 21,500 cfs Feb. 23 (gage height, 12.41 ft); minimum daily discharge 360 cfs Aug. 29.

Period of record: Maximum discharge, 61,800 cfs Jan. 21, 22, 1959 (gage height, 20.65 ft, in gage well, from graph based on gage readings; 21.3 ft, from outside floodmarks); minimum daily, 148 cfs Sept. 7, 1925.

Flood of March 26, 1913 reached a discharge of 257,000 cfs, computed by Miami Conservancy District.

REMARKS.--Records fair. Diurnal fluctuation caused by powerplant 0.4 mile above station. Flood flow regulated by retarding dams beginning in 1920, on Mad River 19 miles upstream, on Stillwater River 23 miles upstream, on Great Miami River 23 miles upstream and on Lorain Creek 52 miles upstream. Also see REMARKS for Station 03261500. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	470	672	620	440	4,900	1,400	705	859	1,600	470	384
2	424	727	650	600	450	3,730	1,710	716	881	1,900	470	510
3	416	617	705	620	460	3,120	1,530	826	859	1,400	520	562
4	392	551	815	2,550	2,310	2,670	1,460	738	1,050	1,130	848	882
5	400	540	694	3,120	11,800	2,370	1,350	716	1,330	892	617	424
6	416	540	650	2,580	9,460	2,520	1,280	2,790	1,080	826	510	606
7	408	510	650	1,520	4,240	3,490	1,270	2,390	1,010	793	470	1,400
8	408	490	650	1,100	2,460	3,660	1,270	4,610	1,220	738	432	815
9	416	500	639	1,000	1,380	2,770	1,120	4,550	1,040	1,000	460	760
10	440	540	595	900	1,200	2,520	1,000	3,630	903	1,060	470	639
11	384	520	595	860	1,310	2,580	925	2,590	848	826	490	738
12	510	518	859	840	2,030	2,930	936	2,370	804	749	470	749
13	771	520	771	840	3,280	5,580	936	3,080	727	749	460	606
14	683	540	837	1,070	2,620	6,520	1,000	2,590	826	826	450	510
15	606	540	892	1,000	2,040	6,080	991	1,920	804	727	432	490
16	530	540	969	900	1,550	7,000	1,020	1,550	738	716	440	480
17	470	562	1,050	840	3,460	5,360	936	1,480	727	628	450	440
18	440	573	892	771	10,900	3,970	881	1,280	650	562	424	416
19	432	617	837	749	10,200	3,380	870	1,220	639	639	408	400
20	606	936	815	716	13,900	3,260	870	1,800	595	650	416	793
21	595	826	870	705	11,900	3,190	848	1,210	837	606	432	760
22	520	738	1,660	727	15,300	2,900	826	1,040	661	584	694	573
23	490	749	1,420	661	20,200	2,720	815	936	628	606	595	672
24	470	738	1,590	639	13,500	2,440	793	958	628	1,720	460	584
25	460	716	1,400	661	7,870	2,200	760	1,490	628	881	424	540
26	470	650	1,060	650	5,530	1,940	771	1,370	7,020	738	432	749
27	480	683	903	520	9,020	1,770	870	1,380	15,500	727	440	628
28	480	705	850	562	7,590	1,670	1,170	1,170	5,290	705	384	661
29	500	738	750	573	-----	1,590	782	1,020	2,910	1,010	360	760
30	562	749	700	639	-----	1,500	738	914	2,000	639	376	672
31	510	-----	650	510	-----	1,420	-----	859	-----	530	384	-----
TOTAL	15,113	18,643	27,090	30,043	176,440	101,750	31,128	53,898	53,692	27,157	14,668	18,984
MEAN	488	621	874	969	6,301	3,282	1,038	1,739	1,790	876	473	633
MAX	771	936	1,660	3,120	20,200	7,000	1,710	4,610	15,500	1,900	848	1,400
MIN	384	470	595	510	450	1,420	738	705	595	530	360	384
CFSM	.18	.23	.32	.36	2.32	1.21	.38	.64	.66	.32	.17	.23
IN.	.21	.26	.37	.41	2.42	1.40	.43	.74	.74	.37	.20	.26

CAL YR 1970 TOTAL 803,110 MEAN 2,200 MAX 25,400 MIN 384 CFSM .81 IN 11.02
WTR YR 1971 TOTAL 568,606 MEAN 1,558 MAX 20,200 MIN 360 CFSM .57 IN 7.80

03271800 Twin Creek near Ingomar, Ohio

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5N., R.3E., Preble County, on left bank at downstream side of bridge on Halderman Road, 0.5 mile downstream from Santos Fork, 1.4 miles west of Ingomar, and 4.8 miles upstream from Aukerman Creek.

DRAINAGE AREA.--197 sq mi.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959, 1961-62. October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft above mean sea level.

AVERAGE DISCHARGE.--9 years, 170 cfs (11.72 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,290 cfs Feb. 22 (gage height, 8.85 ft); minimum, 6.3 cfs Sept. 17-19.
Period of record: Maximum discharge, 19,300 cfs Mar. 4, 1963 (gage height, 14.40 ft), from rating curve extended above 4,000 cfs on basis of contracted-opening measurement at gage height 18.8 ft; minimum daily, 2.5 cfs Sept. 12-14, 1964.
Flood of Jan. 21, 1959 reached a stage of 18.8 ft (discharge, 30,300 cfs, computed by Miami Conservancy District). Flood of Mar. 25, 1913 reached a stage of 28.0 ft.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 11 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	13	23	31	26	292	78	37	60	20	23	6.7
2	6.4	14	21	30	25	241	118	37	63	19	18	6.7
3	6.0	16	21	32	25	208	107	38	60	18	18	6.0
4	7.2	16	25	686	65C	157	9C	37	52	17	26	8.9
5	7.2	14	26	300	2,24C	136	80	35	48	16	20	8.0
6	7.2	14	23	90	22C	204	76	564	43	16	16	10
7	7.2	13	20	75	90	50C	74	925	42	15	14	9.0
8	7.2	13	20	65	65	282	68	1,620	42	14	13	11
9	7.2	13	20	60	56	167	64	635	39	14	12	10
10	9.8	15	19	55	52	164	60	336	36	24	12	8.4
11	10	15	19	52	52	174	54	232	38	26	12	11
12	14	15	26	50	350	420	54	214	36	21	11	11
13	17	14	42	49	450	916	57	180	43	18	10	8.4
14	20	15	35	103	5C	526	6C	14C	38	16	9.8	7.6
15	16	18	31	82	75	622	54	112	36	14	9.3	7.2
16	14	19	38	5C	65	480	53	103	33	13	9.3	6.7
17	12	18	105	46	1,740	285	53	108	29	13	8.9	6.3
18	11	17	76	42	1,200	217	51	96	27	13	8.4	6.3
19	11	16	59	40	1,020	250	47	275	26	13	8.4	6.3
20	14	36	46	38	1,700	235	46	293	26	13	8.4	10
21	22	42	42	36	45C	190	46	126	36	12	8.0	9.8
22	23	52	276	35	4,230	174	47	96	31	12	8.0	9.8
23	18	23	205	34	1,200	152	43	85	29	12	8.0	8.4
24	16	20	120	34	451	129	42	87	26	26	8.0	7.6
25	14	19	75	33	271	114	41	208	25	26	8.0	7.2
26	13	18	55	32	558	107	38	14C	25	21	8.0	11
27	13	19	44	31	905	101	39	99	22	18	8.0	10
28	12	19	38	30	446	97	34	85	22	15	7.6	8.9
29	13	18	36	29	-----	92	47	76	20	110	7.6	8.6
30	15	23	34	28	-----	82	41	70	20	52	7.6	7.6
31	13	-----	32	27	-----	74	-----	64	-----	31	7.2	-----
TOTAL	367.7	559	1,852	2,325	18,812	7,788	1,782	7,559	1,071	668	889.9	287.0
MEAN	12.5	18.6	53.7	75.0	612	251	55.4	246	35.7	21.5	13.4	9.57
MAX	23	42	276	486	4,230	916	119	1,620	43	110	26	11
MIN	7.2	13	19	27	25	74	38	35	20	12	7.2	6.3
COEF	.78	.89	.27	.78	2.41	1.37	.80	1.24	.19	.11	.80	.84
SD	.87	.51	.21	.66	2.95	1.47	.34	1.43	.20	.13	.87	.85
VAL. TO 1970	TOTAL 31,258.4	MEAN 140	MAX 7,452	MIN 4.7	COEF .71	SD 2.48						
VAL. TO 1971	TOTAL 43,215.6	MEAN 118	MAX 4,230	MIN 4.3	COEF .68	SD 2.16						

FROM DISCHARGE GRAPH, 4,770 1971, MEAN, SD 1,000 cfs (15.75 ft).

GREAT MIAMI RIVER BASIN

03272000 Twin Creek near Germantown, Ohio

LOCATION.--Lat 39°38'10", long 84°23'48", in NW 1/4 sec. 11, T.3N., R.4E., Montgomery County, on right bank 0.3 mile downstream from Germantown Dam, 1.5 miles northwest of Germantown, and 3 miles upstream from Little Twin Creek.

DRAINAGE AREA.--275 sq mi.

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.24 ft above mean sea level, adjustment of 1912. Prior to Dec. 18, 1926, non-recording gage at site 1 mile downstream at datum 12.49 ft higher.

AVERAGE DISCHARGE.--53 years (1914-23, 1927-71), 258 cfs (12.74 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,260 cfs Feb. 22 (gage height, 26.28 ft); minimum, 7.0 cfs Sept. 18, 19, 20.
Period of record: Maximum discharge, 9,390 cfs July 8, 1915 (gage height, 11.7 ft, from graph based on gage readings, site and datum then in use); maximum gage height, 29.19 ft Jan. 22, 1959; minimum discharge, 1.5 cfs Sept. 25, 1941.
Flood of Mar. 25, 1913 reached a stage of 18.3 ft, original site and datum (discharge, 66,000 cfs, computed by Miami Conservancy District).

REMARKS.--Records good except those for the winter period, which are fair. Flood flow regulated by Germantown retarding basin, 0.3 miles upstream beginning in 1920. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 403: 1914(M). WSP 1385: 1915(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	28	44	62	46	433	114	56	86	25	33	8.0
2	15	34	43	60	44	366	172	54	86	24	26	8.0
3	14	56	42	60	46	316	163	55	84	21	30	10
4	12	43	55	740	1,100	252	130	55	77	20	58	13
5	12	39	55	540	2,600	216	121	54	70	20	45	12
6	11	35	50	200	420	323	116	1,190	65	20	32	11
7	11	34	44	140	200	702	110	532	61	20	25	21
8	12	31	41	120	140	429	104	2,290	64	18	21	14
9	12	30	40	110	130	276	96	855	57	21	18	13
10	14	37	38	100	120	264	89	493	53	27	17	12
11	14	35	37	94	130	292	83	348	46	43	17	20
12	20	34	49	88	450	447	80	299	49	31	16	16
13	21	34	80	88	735	1,030	83	261	44	29	14	19
14	23	38	74	170	180	679	88	207	61	21	13	12
15	25	44	83	140	130	774	82	148	60	19	12	10
16	40	46	90	100	120	666	77	148	49	18	12	9.0
17	32	44	234	90	1,460	425	74	179	44	16	12	8.5
18	28	41	179	80	2,020	327	73	142	41	16	11	7.5
19	26	34	138	74	1,010	352	69	264	39	17	10	7.0
20	30	66	111	72	2,230	342	65	771	38	16	10	12
21	24	117	108	78	630	244	68	261	44	16	10	14
22	26	83	262	64	2,070	264	68	172	45	15	10	14
23	48	83	414	64	3,100	231	64	140	30	13	9.5	13
24	38	98	240	62	666	105	61	127	36	60	9.0	12
25	34	90	160	60	425	178	54	592	35	46	9.5	11
26	25	46	190	58	667	163	56	234	33	34	10	17
27	28	46	110	54	1,720	191	57	158	35	32	9.5	16
28	28	63	85	54	834	144	56	131	30	24	9.0	15
29	28	60	68	52	-----	136	50	117	28	60	9.0	13
30	30	67	70	60	-----	123	61	104	26	78	9.5	12
31	29	-----	66	48	-----	114	-----	94	-----	45	8.5	-----
TOTAL	620	1,392	3,260	3,772	24,545	10,970	2,930	10,720	1,520	666	534.5	305.0
MEAN	20.0	44.9	105.2	121.7	798.2	352.7	97.9	344.0	50.7	21.5	17.3	12.7
MAX	70	117	414	340	2,020	1,030	83	2,290	44	31	16	19
MIN	12	28	37	60	44	104	82	54	20	13	9.5	7.0
STDEV	13.7	13.7	13.8	14.4	3.20	1.29	1.32	1.26	1.18	1.00	1.00	1.00
1% F	1.7	1.7	1.8	1.9	2.10	1.40	1.00	1.40	1.00	1.00	1.00	1.00

1970 MEAN 20.0 TOTAL 620.0 MEAN 105.2 MAX 414 MIN 37 STDEV 13.8 1% F 1.8
1971 MEAN 21.5 TOTAL 666.0 MEAN 105.2 MAX 44 MIN 13 STDEV 1.00 1% F 1.00

03272800 Sevenmile Creek at Collinsville, Ohio

LOCATION.—Lat 39°31'23", long 84°36'39", in SE 1/4 sec. 14, T.5N., R.2E., Butler County, on left bank at downstream side of bridge, 0.3 mile north of Collinsville, 1.0 mile downstream from Ninemile Creek, and 5.5 miles upstream from mouth.

DRAINAGE AREA.—120 sq mi.

PERIOD OF RECORD.—July 1960 to current year.

GAGE.—Water-stage recorder. Datum of gage is 691.96 ft above mean sea level.

AVERAGE DISCHARGE.—11 years, 104 cfs (11.77 inches per year).

EXTREMES.—Current year: Maximum discharge, 4,380 cfs Feb. 22 (gage height, 6.28 ft); minimum 5.2 cfs Sept. 17, 18, 19.

Period of record: Maximum discharge, 16,800 cfs May 24, 1968, (gage height 11.12 ft); minimum, 0.8 cfs Sept. 5, 1960.

Flood of March 1913 reached a stage of 14.6 ft, from information by local resident. Flood of Jan. 21, 1959 reached a stage of 11.08 ft, from floodmarks (discharge, 16,600 cfs, result of contracted-opening measurement of peak flow).

REMARKS.—Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

COOPERATION.—Gage-height graph and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS.—WSP 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	30	44	25	184	60	27	48	16	13	5.8
2	13	21	29	42	24	161	118	25	51	15	11	7.4
3	11	30	30	42	23	146	92	26	47	15	12	13
4	9.6	25	40	460	350	118	75	25	42	13	40	11
5	9.1	23	38	200	892	107	72	24	38	13	20	8.6
6	8.6	21	34	100	170	192	68	511	36	13	14	7.8
7	8.2	20	31	85	80	295	60	515	38	13	11	7.1
8	8.2	18	30	75	50	197	92	730	38	12	10	6.8
9	7.7	17	29	65	44	146	48	299	34	11	9.5	6.5
10	10	20	28	60	40	152	46	207	30	21	9.1	6.2
11	11	22	27	58	38	172	42	161	28	24	9.5	6.8
12	12	20	42	97	310	248	41	146	27	16	8.6	9.0
13	31	20	48	62	170	334	42	131	29	12	8.2	7.8
14	96	22	43	145	80	251	44	100	82	11	7.8	6.8
15	48	33	39	91	60	330	40	82	75	10	7.8	6.2
16	27	30	80	60	90	285	38	77	54	10	7.8	9.5
17	23	28	128	90	912	188	37	273	31	9.1	9.1	9.2
18	22	28	93	46	363	158	36	128	27	9.1	11	9.2
19	20	25	74	44	383	184	34	391	24	9.5	11	9.2
20	28	104	61	42	512	181	34	398	24	9.1	8.6	7.4
21	60	83	71	46	168	152	56	175	29	8.6	10	8.6
22	43	59	590	39	2,140	141	34	123	28	8.2	11	7.1
23	32	64	217	38	510	128	39	96	25	7.8	10	6.5
24	26	35	132	37	291	185	32	86	20	69	7.1	9.8
25	23	33	90	36	184	94	30	231	19	29	7.1	6.2
26	21	33	73	34	291	92	28	184	18	10	7.1	8.6
27	19	35	66	32	484	62	27	90	18	10	6.8	6.2
28	18	31	60	30	241	78	28	78	19	12	6.8	7.1
29	19	29	94	29	73	73	33	70	17	27	6.5	6.2
30	20	30	80	28	66	29	62	62	16	22	6.2	6.2
31	19	44	44	27	60	60	52	52	16	16	9.2	6.2
TOTAL	688.4	954	2,285	2,198	8,805	5,385	1,421	5,485	1,860	441.4	325.4	215.8
MEAN	22.5	31.0	73.8	71.0	284.0	174.0	45.7	177	61.7	14.4	10.5	7.0
MAX	49	104	388	600	2,140	1,884	118	730	38	24	11	13
MIN	9.6	17	27	27	23	60	27	24	15	9.5	6.8	6.2
COEFF	0.19	0.27	0.54	0.54	0.62	0.56	0.38	0.48	0.29	0.25	0.25	0.28
STDEV	0.81	0.80	0.68	0.68	0.73	0.57	0.61	0.50	0.30	0.25	0.20	0.20

COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION COEFF OF VARIATION

STANDARD DEVIATION STDEV STDEV STDEV STDEV STDEV STDEV STDEV STDEV STDEV STDEV STDEV STDEV

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1N., R.3E., Butler County, on right bank 1,000 ft downstream from Columbia Bridge at Hamilton, 3 miles downstream from Four Mile Creek, and 4.3 miles upstream from Pleasant Run.

PERIOD OF RECORD.—January 1907 to June 1909 (fragmentary), January 1910 to September 1918, April 1927 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 0.7 mile upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Hamilton,

GAGE.--Water-stage recorder. Datum of gage is 499.98 ft above mean sea level, adjustment of 1912. Prior to Apr. 12, 1927, non-recording gages at site 0.7 mile upstream at datum 64.65 ft higher.

EXTREMES.--Current year: Maximum discharge, 38,300 cfs Feb. 22 (gage height, 69.68 ft); minimum, 372 cfs Aug. 9 (gage height, 56.47 ft).

Period of record: maximum discharge, 352,000 cfs Mar. 26, 1913 (gage height, 38.5 ft, site and datum then in use), computed by Miami Conservancy District; minimum, 100 cfs Sept. 26, 27, 1941; minimum gage height, 55.73 ft Oct. 18, 1960.

REMARKS.--Records good. Some regulation at low flow by industrial plants above station. Flood flow regulated by five retarding basins above station beginning in 1920 (see remarks for Great Miami River at Miamisburg, (03271500), and Twin Creek near Germantown, (03272000). Small diversion about 6 miles above gage for municipal supply of Hamilton. Diversion averaged 2.2 cfs in 1971 and is returned as sewage 1.4 miles downstream from the station. The Miami & Erie Canal diverted water from the basin 1.7 miles above station until Nov. 1, 1930, when canal was abandoned; amount of diversion not known. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 503: 199. WSP 1900: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542	62	957	953	632	7,420	1,850	929	1,190	2,060	713	434
2	535	60	848	878	615	5,680	2,330	883	1,220	2,010	628	459
3	512	1,050	899	867	598	4,550	2,130	920	1,180	1,850	678	728
4	476	72	1,000	5,200	3,500	3,870	1,990	988	1,160	1,500	1,020	1,090
5	408	73	921	4,950	16,000	3,410	1,850	977	1,520	1,240	1,040	761
6	451	69	775	4,160	12,900	4,010	1,810	5,490	1,400	1,020	769	428
7	482	62	748	2,650	6,450	6,540	1,730	5,560	1,230	977	660	1,430
8	492	65	764	2,030	3,880	5,440	1,710	12,500	1,330	920	602	1,310
9	470	68	790	1,740	2,420	4,280	1,620	7,550	1,320	836	500	856
10	494	62	753	1,580	1,840	3,690	1,470	5,850	1,120	1,480	560	744
11	520	66	729	1,510	1,720	4,390	1,350	4,110	1,030	1,390	560	1,070
12	494	60	1,030	1,440	1,300	4,810	1,320	3,370	958	1,020	580	1,080
13	430	65	1,190	1,340	5,760	7,160	1,330	3,750	929	901	537	820
14	1,000	64	1,020	2,080	3,860	8,860	1,400	3,610	865	939	521	683
15	1,090	74	1,120	1,850	2,030	9,140	1,410	2,710	1,220	910	508	572
16	812	70	1,380	1,700	2,410	9,200	1,410	2,150	892	796	684	856
17	708	70	1,990	1,470	4,630	7,760	1,350	2,580	803	778	609	416
18	591	79	1,580	1,190	15,180	9,850	1,270	2,130	883	675	686	500
19	971	76	1,320	1,090	13,000	5,010	1,210	1,820	785	595	459	467
20	675	1,340	1,260	1,940	16,000	4,810	1,210	9,370	654	660	438	697
21	1,150	1,30	1,370	988	15,200	4,350	1,170	2,330	735	602	694	1,330
22	940	1,23	4,190	1,020	2,980	3,970	1,160	1,740	892	634	505	829
23	784	1,00	3,718	985	2,780	3,570	1,120	1,550	675	583	735	728
24	708	1,40	2,875	908	17,600	3,200	1,080	1,440	641	1,450	608	761
25	815	1,03	2,680	898	11,800	2,880	1,050	2,300	628	1,690	521	654
26	506	98	1,908	906	7,940	2,550	977	2,138	2,600	1,610	543	888
27	408	90	1,540	770	12,000	2,330	1,020	1,920	16,000	948	516	429
28	508	1,00	1,350	694	19,900	2,188	1,388	1,730	8,740	910	489	757
29	508	1,00	1,330	735	-----	2,088	1,168	1,500	3,970	1,178	429	817
30	808	1,11	1,210	788	-----	2,088	996	1,360	2,550	1,110	405	803
31	887	1,00	1,090	760	-----	1,918	-----	1,238	-----	847	815	-----
32	506	98	1,908	906	7,940	2,550	977	2,138	2,600	1,610	543	888
33	408	90	1,540	770	12,000	2,330	1,020	1,920	16,000	948	516	429
34	508	1,00	1,350	694	19,900	2,188	1,388	1,730	8,			

GREAT MIAMI RIVER BASIN

171

02276500 Whitewater River at Brookville, Indiana

LOCATION.--Lat 39°24'24", long 85°00'46", in NE 1/4 NW 1/4 sec. 32, T.9N., R.2W., Franklin County, on right bank at downstream side of highway bridge, 0.3 mile downstream from East Fork Whitewater River, and 1.1 miles south of Brookville.

DRAINAGE AREA.--1,224 sq mi.

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), and July 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft above mean sea level. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--50 years (1915-17, 1923-71), 1,252 cfs (13.89 inches per year).

EXTREMES.--Current year: Maximum discharge, 29,000 cfs Feb. 22 (gage height, 16.34 ft); minimum daily, 148 cfs Sept. 19.
Period of record: Maximum discharge, 81,800 cfs Jan. 21, 1959 (gage height, 27.78 ft), from rating curve extended above 45,000 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 60 cfs July 27, 1934.
Flood of Mar. 25, 1913, reached a stage of 39.0 ft, present datum, from floodmarks (discharge not determined).

REMARKS.--Records good.

REVISIONS (WATER YEAR).--WSP 1335: 1915-17, 1929, 1930(M), 1933(M), 1934, 1935(m), 1936. WSP 1505: 1916(M), WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	321	435	500	340	2,330	828	455	550	381	289	150
2	218	321	417	480	330	1,980	1,360	445	677	357	259	150
3	210	385	403	470	320	1,760	1,130	447	821	328	244	238
4	208	377	406	4,460	4,720	1,500	969	441	702	310	314	480
5	205	353	475	3,440	13,700	1,360	877	439	605	298	280	210
6	205	335	457	1,630	3,770	1,510	876	3,170	545	298	256	178
7	205	321	412	1,220	1,700	2,350	848	3,390	744	292	226	190
8	202	307	408	1,090	940	1,840	790	5,090	1,040	283	220	218
9	208	301	399	918	780	1,080	740	2,920	918	277	210	198
10	280	331	390	800	720	1,520	692	1,980	659	490	205	178
11	301	357	381	700	680	1,930	658	1,590	560	1,010	204	365
12	293	335	417	660	3,000	2,120	638	1,580	550	555	224	317
13	793	328	490	640	4,210	2,690	634	1,900	873	377	208	235
14	865	335	505	620	1,250	2,500	694	1,410	942	307	220	198
15	858	475	485	1,200	940	3,370	658	1,140	1,130	283	192	182
16	581	466	550	870	800	3,410	671	1,000	659	271	190	168
17	471	430	1,170	850	7,050	2,310	602	1,290	545	265	182	180
18	412	400	982	580	7,910	1,860	580	1,060	480	253	188	150
19	377	390	843	500	4,140	1,990	553	1,110	4,500	253	140	148
20	377	1,440	723	480	10,200	2,130	538	1,550	2,250	234	182	490
21	555	1,040	772	400	4,070	1,890	531	942	1,260	226	172	645
22	560	737	2,890	440	20,900	1,670	529	766	974	223	172	373
23	405	611	2,050	430	12,800	1,490	508	702	702	220	162	263
24	430	500	1,470	420	4,070	1,310	494	671	575	328	167	261
25	403	471	1,110	420	2,690	1,220	476	1,110	520	308	163	218
26	381	462	865	410	2,890	1,150	456	1,260	475	292	183	764
27	361	457	760	403	5,540	1,060	454	926	439	262	180	439
28	338	435	660	420	3,240	1,010	528	774	403	253	165	310
29	331	417	608	440	-----	952	565	702	540	426	154	262
30	353	444	564	427	-----	893	468	835	435	462	158	235
31	338	-----	520	370	-----	840	-----	587	-----	334	157	-----
TOTAL	12,029	13,890	23,085	76,928	123,700	59,425	28,731	41,527	26,092	11,050	8,304	8,373
MEAN	388	432	744	2482	4013	1885	927	1310	813	356	269	269
MAX	865	1,440	2,890	4,460	70,900	3,410	1,360	5,090	4,500	1,010	314	764
MIN	202	301	381	370	320	840	454	439	403	220	154	148
CFR	437	438	471	471	3,410	1,440	450	1,070	471	470	477	423
100	437	442	471	470	3,410	1,440	451	1,070	470	470	470	423
CFR 1970	TOTAL 413,843	413,843	413,843	413,843	413,843	413,843	413,843	413,843	413,843	413,843	413,843	413,843
MEAN 1970	TOTAL 284,813	284,813	284,813	284,813	284,813	284,813	284,813	284,813	284,813	284,813	284,813	284,813

PEAK DISCHARGE (1915-71), 10,000 CFS

DATE	TIME	Q, CFS	DISCHARGE	DATE	TIME	Q, CFS	DISCHARGE
SEP	1915	10,000	10,000	SEP	1915	10,000	10,000
SEP	1915	10,000	10,000	SEP	1915	10,000	10,000

WABASH RIVER BASIN

03322500 Wabash River near New Corydon, Indiana

LOCATION.--Lat 40°33'50", long 84°48'10", in NE 1/4 SE 1/4 sec. 3, T.24N., R.15E., Jay County, on left bank, 10 ft downstream from county bridge on Indiana-Ohio State line road, 2 miles east of New Corydon, 2.8 miles downstream from Beaver Creek, and at mile 465.6.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft above mean sea level. Prior to June 24, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 178 cfs (9.23 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,290 cfs Feb. 22 (gage height, 17.15 ft); minimum daily, 5.0 cfs Feb. 3.
Period of record: Maximum discharge, 8,720 cfs Jan. 22, 1959 (gage height, 20.47 ft, from floodmarks); minimum daily, 0.6 cfs Dec. 22, 23, 1963.

REMARKS.--Records poor. Occasional regulation by Grand Lake Reservoir, diversion from or into St. Marys River basin, and into Miami and Erie Canal. Water-quality records for the current year are published in WRD Indiana, 1971, Part 2.

REVISIONS (WATER YEARS).--WSP 1555: 1957(P). WSP 1909: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	8.0	10	6.5	6.0	315	76	16	86	70	30	11
2	8.2	8.0	10	6.0	5.5	250	77	15	390	52	25	15
3	7.7	8.8	9.9	6.0	5.0	210	76	15	898	40	22	19
4	7.3	8.6	9.1	45	25	190	68	15	308	34	21	22
5	7.3	8.4	9.3	230	1,790	170	62	15	170	30	22	35
6	7.1	9.1	8.8	80	1,070	190	56	83	140	27	20	43
7	7.3	8.0	8.2	35	311	230	53	119	143	23	18	99
8	7.3	8.0	8.4	25	95	300	90	262	120	21	17	76
9	6.9	8.4	8.6	20	45	180	46	187	97	20	17	34
10	8.8	10	8.2	18	30	190	41	143	88	22	16	19
11	11	13	9.5	17	25	220	37	123	81	101	26	13
12	7.3	11	13	15	40	388	33	120	77	102	34	11
13	11	10	33	14	120	978	33	131	82	67	23	11
14	13	11	26	15	85	405	82	113	93	48	18	11
15	14	12	13	17	60	692	82	101	81	39	16	9.9
16	10	12	10	14	45	680	64	88	72	35	19	8.0
17	8.2	11	12	14	200	400	53	81	65	33	14	6.7
18	6.4	11	17	12	1,790	301	44	76	39	33	14	6.0
19	6.6	7.3	15	11	1,590	303	36	77	34	32	13	5.3
20	6.6	7.5	12	9.5	2,390	346	31	95	52	31	40	30
21	7.5	11	11	8.5	1,410	278	28	93	93	31	68	137
22	7.7	9.4	11	8.0	2,060	248	27	81	94	27	36	79
23	6.4	8.6	94	7.0	1,980	225	25	72	48	25	23	41
24	5.8	8.0	51	7.0	164	209	23	83	44	24	18	22
25	6.4	7.1	35	6.5	362	197	21	815	40	65	15	14
26	6.2	8.0	17	9.0	634	188	19	388	745	52	14	82
27	7.1	8.6	12	8.0	925	191	17	173	442	38	13	146
28	7.7	9.3	18	7.0	474	166	14	134	141	30	12	81
29	6.0	9.9	9.0	6.9	-----	165	21	119	93	28	12	47
30	7.7	11	7.5	6.0	-----	113	18	102	67	24	11	38
31	8.0	-----	7.0	6.0	-----	86	-----	93	-----	32	11	-----
TOTAL	248.5	282.7	546.5	495.5	18,094.5	9,204	1,318	4,016	9,883	1,792	694	1,163.9
MEAN	8.02	9.12	17.6	15.6	584	297	42.9	130	163	60.4	21.1	36.6
MAX	10	10	94	94	2,390	978	82	815	998	102	68	146
MIN	5.0	7.1	7.0	6.0	5.0	56	17	15	40	20	11	5.3
CFRQ	1.03	1.04	1.07	1.15	2.47	1.13	1.17	1.00	1.07	1.15	1.08	1.15
CM	1.04	1.04	1.05	1.10	2.57	1.11	1.19	1.07	1.07	1.16	1.09	1.17
DAY NO 1970	TOTAL 55,914.7	MEAN 148	MAX 3,240	MIN 5.0	CFRQ 1.34	CM 7.66						
DAY NO 1971	TOTAL 42,778.6	MEAN 136	MAX 2,390	MIN 5.0	CFRQ 1.46	CM 6.81						

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	Q, CFS	DISCHARGE	DATE	TIME	Q, CFS	DISCHARGE
1970	1000	10,110	2,000	1971	0100	15,110	2,000

STREAMS TRIBUTARY TO LAKE ERIE

173

04178000 St. Joseph River near Newville, Indiana

LOCATION.--Lat 41°23'08", long 84°48'06", in SW 1/4 SW 1/4 sec. 18, T.5N., R.1E., Defiance County, Ohio, on left bank at bridge on Ohio State Highway 249, 3.5 miles northeast of Newville and 6.5 miles northwest of Hicksville, Ohio.

DRAINAGE AREA.--610 sq mi.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft above mean sea level. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--25 years, 493 cfs (10.98 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,210 cfs Feb. 23 (gage height, 14.11 ft); minimum daily, 20 cfs Aug. 30, 31, Sept. 1. Period of record: Maximum discharge, 9,710 cfs Apr. 6, 1950 (gage height, 17.05 ft); minimum daily, 14 cfs Sept. 1, 16, 1964.

REMARKS.--Records good except those for parts of December, January, February, and September, which are fair. Records of chemical analyses for current year at site 0.5 mile downstream (04178100 St. Joseph River at Indiana-Ohio State Line) are published in WRD Indiana, 1971, Part 2.

REVISIONS.--WSP 2112: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	134	1,130	220	74	2,170	419	161	132	54	6	20
2	67	136	1,130	210	74	2,050	465	162	205	50	3	28
3	60	169	1,030	199	74	1,800	555	162	603	47	9	38
4	55	178	876	213	162	1,370	591	157	503	44	0	39
5	53	173	658	255	1,550	1,020	537	154	333	46	9	39
6	50	160	524	220	2,000	843	501	427	247	51	5	44
7	49	144	450	200	2,450	983	421	570	221	51	8	48
8	48	126	380	180	2,000	960	388	493	263	36	4	60
9	48	114	325	160	1,500	920	361	398	248	60	3	49
10	52	113	296	150	1,250	775	339	324	210	57	4	41
11	52	117	279	145	1,300	645	321	275	174	60	0	43
12	66	139	291	140	1,250	627	297	242	152	69	0	41
13	80	163	325	135	1,250	800	284	217	142	64	0	37
14	155	157	378	130	1,250	955	294	198	204	52	4	33
15	253	144	363	125	860	1,400	317	178	258	46	5	29
16	289	131	315	120	600	1,810	326	162	227	44	2	29
17	268	123	302	115	600	1,960	314	152	168	44	3	28
18	195	115	300	110	900	1,900	299	141	136	44	7	26
19	142	109	420	105	1,600	1,920	285	132	116	52	0	25
20	117	180	738	100	2,400	1,750	270	127	101	205	7	32
21	117	375	760	100	3,210	1,450	288	119	93	295	6	45
22	114	426	708	90	3,840	1,220	248	114	87	140	6	61
23	113	394	562	90	4,130	1,050	235	108	82	92	2	58
24	112	310	445	90	3,670	900	215	109	79	77	2	41
25	106	224	349	96	3,120	755	205	238	79	68	3	43
26	97	191	330	94	2,930	629	192	200	70	66	3	49
27	91	178	305	90	2,700	595	175	273	70	60	3	56
28	84	414	280	86	2,400	500	172	234	66	62	2	53
29	87	353	265	84	-----	470	167	193	61	50	2	48
30	101	1,100	240	82	-----	490	167	168	50	51	2	48
31	115	-----	230	78	-----	430	-----	145	-----	48	2	44
TOTAL	3,313	7,290	14,992	4,236	50,466	25,183	9,622	6,420	5,400	2,176	1,011	1,227
MEAN	107	235	484	137	1,602	1,135	311	210	183	70.1	32.	40.9
MAX	289	1,100	1,130	255	4,130	2,170	591	570	603	603	9	61
MIN	40	100	870	70	70	439	167	108	60	44	0	20
CFR	.18	.40	.74	.10	8.95	1.80	.53	.30	.30	.51	.05	.07
IN	.08	.04	.09	.03	2.08	0.15	.00	.42	.33	.13	.05	.07
CO. W. 1970	TOTAL 107,014	MEAN 428	MAX 2,500	MIN 11	CFR .47	IN 0.14						
CO. W. 1971	TOTAL 141,017	MEAN 389	MAX 4,130	MIN 20	CFR .44	IN 0.15						

04181500 St. Marys River at Decatur, Indiana

LOCATION.--Lat 40°50'55", long 84°56'16", in SW 1/4 SW 1/4 sec. 27, T.28N., R.14E., Adams County, on right bank 10 ft downstream from bridge on U.S. Highway 27, 0.5 mile upstream from Holthouse ditch, and 1.3 miles north of Decatur.

DRAINAGE AREA.--621 sq mi.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mile upstream January 1932 to November 1954, and at present site thereafter are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft above mean sea level. Prior to July 27, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--25 years, 472 cfs (10.32 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,580 cfs Feb. 23 (gage height, 18.43 ft); minimum daily, 17 cfs Oct. 6-9.
Period of record: Maximum discharge, 11,300 cfs Feb. 10, 11, 1959; maximum gage height, 24.22 ft Feb. 10, 1959 (ice jam); minimum daily discharge, 5.4 cfs Oct. 18, 1960.

REMARKS.--Records good. Flow regulated by Grand Lake Reservoir. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

REVISIONS (WATER YEARS).--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	102	54	25	1,230	139	49	391	283	54	26
2	21	20	67	50	25	968	164	50	465	194	44	25
3	20	19	52	48	25	837	154	50	1,730	117	39	32
4	19	21	48	80	60	638	133	50	1,210	79	37	42
5	18	21	48	250	1,480	480	118	47	792	61	35	33
6	17	22	43	180	1,200	395	117	1,080	794	51	31	102
7	17	21	39	105	780	574	121	1,170	1,360	43	28	247
8	17	20	35	96	580	446	114	1,940	1,240	37	26	173
9	17	22	34	88	500	367	103	1,710	766	130	26	105
10	19	25	34	82	440	416	94	1,260	458	97	33	116
11	25	26	37	79	430	440	85	1,190	285	276	69	113
12	23	26	57	76	410	722	80	1,100	210	904	46	87
13	21	23	133	73	380	1,600	87	899	172	638	31	64
14	33	25	108	68	330	1,460	99	659	172	467	26	49
15	47	25	69	61	310	1,570	90	496	150	323	27	40
16	46	25	75	54	290	1,660	85	405	175	174	28	35
17	36	28	118	47	290	1,180	110	316	156	99	27	30
18	29	28	134	43	750	967	149	220	122	71	25	26
19	26	28	133	39	2,000	964	137	166	94	55	23	24
20	30	37	108	37	3,130	1,060	117	144	76	47	25	44
21	29	43	87	35	3,030	838	107	145	66	41	42	54
22	25	41	97	34	2,940	674	100	115	57	37	40	72
23	24	34	119	33	3,540	557	86	97	50	32	29	93
24	23	24	130	33	3,260	451	77	105	46	54	23	148
25	23	29	100	32	2,660	366	73	591	44	77	28	129
26	21	28	87	31	2,470	295	68	851	72	76	34	337
27	19	33	79	29	2,530	246	63	712	109	116	32	1,140
28	18	34	72	28	1,980	214	61	962	167	117	28	745
29	18	34	66	27	-----	193	58	1,100	267	94	24	509
30	18	187	61	26	-----	163	54	907	305	79	22	444
31	23	-----	57	26	-----	142	-----	622	-----	71	19	-----
TOTAL	742	1,843	2,429	1,944	35,645	22,113	3,043	19,298	12,021	4,940	1,001	5,084
MEAN	23.9	34.8	76.4	62.7	1,280	713	101	629	401	159	32.3	169
MAX	47	137	134	250	3,540	1,660	164	1,940	1,730	904	69	1,140
MIN	17	19	34	26	25	142	54	47	44	32	19	24
CFSM	.84	.86	.13	.10	2.88	1.15	.16	1.08	.85	.26	.05	.27
IN.	.84	.86	.15	.12	7.15	1.32	.18	1.15	.72	.30	.06	.30

CAL YR 1970 TOTAL 137,092 MEAN 376 MAX 3,570 MIN 14 CFSM .61 IN 8.21
BYR YR 1971 TOTAL 109,413 MEAN 360 MAX 3,540 MIN 17 CFSM .68 IN 8.55

PEAK DISCHARGE (BASE, 2,000 CFS).--Feb. 23 (1960) 3,300 cfs (18.43 ft).

STREAMS TRIBUTARY TO LAKE ERIE

175

04183000 Maumee River at New Haven, Indiana

LOCATION.--Lat 41°05'06", long 85°01'19", in SE 1/4 NE 1/4 sec. 2, T.30N., R.13E., Allen County, on left bank 600 ft upstream from bridge on Landin Road, 1400 ft upstream from the Wabash Railroad bridge, 0.8 mile north of New Haven, 2.8 miles upstream from Sixmile Creek.

DRAINAGE AREA.--1,967 sq mi.

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft above mean sea level. Prior to Sept. 7, 1956, nonrecording gage and Sept. 7, 1956, to Sept. 14, 1965, water-stage recorder at site 500 ft downstream at same datum.

AVERAGE DISCHARGE.--15 years (1956-71), 1,494 cfs (10.13 inches per year).

EXTREMES.--Current year: Maximum discharge, 10,400 cfs Feb. 20 (gage height, 16.29 ft); minimum daily, 105 cfs Aug. 22, Sept. 19. Period of record: Maximum discharge, 19,100 cfs Feb. 16, 1950 (gage height, 21.4 ft at site then in use); minimum daily, 48 cfs Oct. 6, 13, 1963.

REMARKS.--Records good except those for parts of December, January and February, which are fair. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles upstream from station. Flow slightly regulated by upstream reservoirs.

REVISIONS.--WSP 2112: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	292	2,630	460	140	5,570	997	299	1,220	480	223	107
2	162	348	2,190	450	140	4,360	1,130	434	2,410	492	191	229
3	177	460	1,850	436	140	3,880	1,080	414	2,640	433	176	226
4	153	529	1,790	727	200	3,280	1,130	320	3,350	283	162	201
5	328	468	1,550	696	800	2,600	1,130	409	2,210	264	157	171
6	106	364	1,010	610	5,000	2,260	1,030	2,570	1,600	235	153	271
7	122	416	915	510	3,800	2,840	761	4,240	1,810	244	144	320
8	130	372	763	470	3,000	2,480	912	3,630	2,330	212	136	376
9	205	306	682	435	2,350	1,990	789	3,790	1,930	270	147	278
10	432	408	633	405	2,000	1,820	707	2,970	1,280	353	165	208
11	275	396	628	380	1,800	1,680	682	2,350	920	464	282	201
12	243	420	736	355	1,600	1,960	670	2,070	741	524	165	198
13	243	400	700	340	1,450	4,070	1,820	1,800	669	961	159	180
14	1,090	392	895	320	1,350	4,480	831	1,390	520	690	180	171
15	1,110	404	930	310	1,300	5,190	726	1,050	512	588	120	171
16	696	360	810	290	1,200	6,030	1,050	846	615	467	112	171
17	606	388	763	280	1,350	5,130	825	872	597	318	112	171
18	464	348	800	265	2,500	4,240	833	576	452	244	112	156
19	428	320	1,190	250	4,700	4,050	854	603	538	225	112	105
20	340	633	1,680	235	10,200	4,280	718	449	376	217	150	534
21	392	952	1,900	225	9,520	3,590	386	469	320	204	112	215
22	282	1,070	1,190	210	8,900	3,280	427	384	320	121	105	165
23	310	790	1,370	200	9,400	2,740	712	335	292	314	268	171
24	275	696	1,070	195	8,780	2,260	411	628	264	405	201	208
25	278	565	952	190	8,660	1,870	613	1,580	306	262	130	240
26	254	529	583	180	8,710	1,590	544	2,130	520	266	115	386
27	229	480	570	170	8,860	1,320	494	1,680	345	215	112	868
28	261	1,690	540	165	7,810	1,180	563	1,470	320	240	112	1,410
29	320	2,790	520	160	-----	1,230	441	1,690	356	269	107	790
30	296	3,370	495	150	-----	1,020	397	1,620	437	252	110	628
31	328	-----	480	145	-----	964	-----	1,230	-----	246	107	-----
TOTAL	10,744	20,956	32,815	10,214	115,660	93,734	21,663	64,298	30,207	10,998	4,637	9,524
MEAN	347	699	1,059	329	4,131	3,054	789	1,429	1,007	355	150	317
MIN	1,110	3,370	2,630	727	10,200	6,030	1,820	4,240	3,350	961	262	1,410
MAX	106	292	480	145	140	964	386	299	264	204	105	105
CF50	.18	.36	.54	.17	2.10	1.54	.40	.73	.51	.18	.08	.16
CF5	.20	.40	.62	.19	2.19	1.77	.45	.84	.57	.21	.09	.18

Cal Yr 1970 TOTAL 503,655 MEAN 1,380 MAX 10,200 MIN 98 CF50 .70 IN 9.83
 Cal Yr 1971 TOTAL 407,450 MEAN 1,116 MAX 10,200 MIN 105 CF50 .57 IN 7.71

PEAK DISCHARGE (BASE, 2,500 CFS)--Feb. 20 (1960) 10,400 cfs (16.29 ft).

LOCATION.--Lat 41°11'56", long 84°44'40", in sec. 22, T.3N., R.1E., Paulding County, on left bank 425 ft downstream from bridge on State Highway 49, 1 mile north of Antwerp, 7 miles downstream from Indiana State line, and 10 miles upstream from Marie DeLarme Creek.

PERIOD OF RECORD.--September 1921 to December 1935, April 1939 to current year.

GAGE.—Water-stage recorder. Datum of gage is 694.90 ft above mean sea level. Prior to Sept. 13, 1925, nonrecording gage at site 400 ft upstream at same datum.

AVERAGE DISCHARGE.—46 years, 1,641 cfs (10.47 inches per year).

EXTREMES.—Current year: Maximum discharge, about 13,000 cfs Feb. 20 or 21; maximum gage height, 17.19 Feb. 21 (ice jam); minimum 107 cfs Aug. 23.

Period of record: Maximum discharge, 26,200 cfs May 20, 1943 (gage height, 20.29 ft); minimum, 24 cfs Oct. 17, 1930, June 21, 1933 (gage height, 0.32 ft).

Flood of Mar. 27, 1913, estimated as 40,000 cfs.

REMARKS.—Records good except those for the winter period, which are fair. Low flow slightly regulated by powerplant at Fort Wayne, Indiana, 32 miles upstream. Flow slightly regulated by upstream reservoirs. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1174: 1927, 1933, 1940. WSP 1387: 1922-23, 1925-27, 1934. WRD Ohio 1970: Drainage area.

Day	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	358	3,010	520	180	6,770	1,060	403	1,210	406	258	120
2	258	334	2,440	500	170	4,890	1,200	358	2,670	451	236	124
3	197	442	2,040	480	190	4,150	1,250	472	2,530	439	207	228
4	207	520	2,000	520	400	3,580	1,210	442	3,130	391	187	266
5	187	560	1,740	700	4,000	2,820	1,230	364	2,830	279	172	239
6	340	488	1,380	920	7,600	2,320	1,200	1,990	1,860	258	163	216
7	151	394	1,110	720	6,000	2,760	1,040	4,490	1,530	233	160	302
8	137	442	955	620	4,400	2,690	850	4,110	1,950	236	153	346
9	155	394	835	540	3,000	2,240	985	3,950	2,160	215	139	382
10	290	367	725	480	2,300	1,830	825	3,570	1,620	271	142	307
11	388	427	690	440	2,000	2,020	755	2,550	1,140	355	220	239
12	304	433	740	410	1,800	1,850	730	2,280	900	427	288	223
13	271	439	915	380	1,700	3,470	1,200	1,950	720	612	180	223
14	397	418	970	360	1,600	4,990	1,500	1,690	645	870	177	207
15	1,540	421	1,090	340	1,500	5,750	725	1,340	496	630	200	197
16	1,050	421	1,030	330	1,400	6,650	1,000	1,040	516	556	144	185
17	710	391	930	320	1,600	6,020	1,020	925	580	436	124	202
18	584	409	900	300	3,600	4,680	905	875	564	325	122	182
19	488	373	1,360	290	6,000	4,340	910	600	439	260	120	205
20	433	415	1,780	280	11,000	4,490	915	604	504	236	120	165
21	385	960	2,040	270	12,000	4,360	665	476	373	233	155	536
22	370	1,170	1,530	260	12,000	3,600	430	472	328	225	142	269
23	319	1,050	1,500	250	11,000	3,050	548	403	328	397	113	200
24	334	815	1,450	240	11,000	2,530	645	394	299	343	232	195
25	313	690	1,220	230	10,200	2,060	484	1,390	266	412	236	225
26	310	584	955	230	9,640	1,790	616	1,950	415	282	146	290
27	285	544	885	220	9,770	1,580	560	2,040	468	228	128	400
28	266	1,260	840	210	8,990	1,330	536	1,580	352	226	117	1,110
29	299	2,430	600	200	-----	1,330	472	1,600	316	252	122	1,240
30	361	3,980	580	200	-----	1,760	645	1,690	358	282	117	795
31	340	-----	540	190	-----	1,120	-----	1,520	-----	266	113	-----
TOTAL	11,962	21,929	30,300	11,950	145,040	102,320	26,011	67,518	31,497	11,034	5,143	9,815
MEAN	386	711	1,237	385	5,180	3,301	867	1,533	1,050	358	164	327
MAX	1,540	3,980	3,010	920	12,000	6,770	1,500	4,490	3,130	870	288	1,240
MIN	137	334	540	19								

PEAK DISCHARGE (BASE, 0.000 CFS)

DATE	TIME	G. M.	DIRECTION	DATE	TIME	G. M.	DIRECTION
2-26	0700	14.00	South 9.000	2-26	0800	17.10	"
2-26 08 00 (Observed) (Observed) South 17.000							

G4134500 Beam Creek at Powers, Ohio

LOCATION.--Lat 41°40'39", long 84°13'56", in NE 1/4 sec. 24, T.9S., R.1E., Fulton County, on right bank at downstream side of bridge on U.S. Highway 20, 1 mile east of Powers, 2.2 miles upstream from Iron Creek, 3 miles downstream from Silver Creek, and 5.2 miles east of Fayette.

DRAINAGE AREA.--206 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 722.57 ft above mean sea level. Prior to Jan. 18, 1941, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 158 cfs (10.42 inches per year).

EXTREMES.--Current year: Maximum discharge, about 3,200 cfs Feb. 22; minimum daily, 6.0 cfs Sept. 1.
Period of record: Maximum discharge, 4,250 cfs Apr. 29, 1956 (gage height, 13.82 ft); minimum, 5.0 cfs Aug. 9, 1964.

REMARKS.--Records good except those for the winter period and periods of no gage-height record which are poor. Water-quality records for current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WEP 1307: 1948(M). WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	90	524	76	29	721	160	70	44	21	15	6.0
2	32	82	394	72	28	571	220	69	62	20	14	8.0
3	30	81	311	70	27	421	216	67	70	19	13	11
4	28	84	300	72	30	314	189	65	61	18	12	16
5	27	82	297	80	1,000	278	167	63	53	17	14	15
6	26	82	231	74	1,610	250	152	78	106	19	14	19
7	26	79	182	68	1,400	418	144	102	110	24	13	15
8	25	73	160	62	1,100	320	128	95	84	23	12	14
9	26	70	147	58	840	245	136	84	67	21	12	13
10	37	96	139	56	640	230	125	76	57	19	12	12
11	58	118	140	54	920	196	123	70	50	21	14	11
12	55	112	212	52	440	178	120	68	172	24	16	10
13	51	105	226	50	340	197	122	68	195	21	13	9.0
14	88	94	201	48	310	416	141	67	176	17	12	8.5
15	232	87	160	46	280	800	138	64	106	15	11	8.0
16	165	84	150	44	260	894	126	61	77	16	10	7.6
17	118	78	140	42	250	699	122	58	62	17	9.5	7.2
18	95	76	141	40	270	468	122	56	52	18	9.0	7.0
19	82	73	188	38	380	359	115	53	45	20	9.0	6.8
20	75	138	366	38	600	383	110	51	40	23	8.2	9.0
21	76	300	276	38	1,200	329	104	48	37	22	7.6	20
22	85	233	203	37	2,700	287	99	46	36	21	7.2	22
23	81	173	171	37	1,900	257	90	44	34	20	8.4	18
24	74	130	149	36	1,400	219	84	46	33	19	9.6	14
25	69	100	118	36	1,100	193	83	70	30	19	9.0	12
26	64	96	110	35	1,000	178	78	78	29	20	8.2	11
27	69	110	100	34	900	170	74	70	28	18	7.4	13
28	60	660	90	33	820	167	74	62	26	17	6.8	16
29	69	930	86	32	-----	172	79	95	24	16	7.0	18
30	94	775	82	31	-----	165	74	90	22	15	7.0	17
31	102	-----	78	30	-----	199	-----	46	-----	15	6.4	-----
TOTAL	2,143	5,291	6,072	1,910	21,344	10,698	3,738	2,000	1,988	895	927.3	374.1
MEAN	69.1	176	196	61.6	704	344	124	64.5	66.3	29.2	29.6	12.5
MAX	232	930	924	80	2,700	894	220	102	195	24	16	22
MIN	29	70	78	37	27	159	74	44	22	15	6.4	6.0
CFSM	.16	.85	.95	.24	3.71	1.67	.60	.31	.32	.09	.09	.06
IN	.19	.96	1.10	.27	9.48	1.92	.67	.38	.38	.11	.06	.07
DAY 1970	TOTAL 60,440	MEAN 167	MAX 1,200	MIN 19	CFSM .01	IN 11.01						
DAY 1971	TOTAL 94,004	MEAN 154	MAX 2,700	MIN 6.0	CFSM .79	IN 10.19						

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-3	2:00	11.74	1,970	2-22	Unknown	Unknown	About 2,000

Note: No gage-height record Jan. 3-11, Feb. 8-11, Feb. 19 to Mar. 1, June 26 to Sept. 30.

04185000 Tiffin River at Stryker, Ohio

LOCATION.--Lat 41°30'17", long 84°25'49", in SW 1/4 sec. 5, T.6N., R.4E., Williams County, on right bank 0.5 mile downstream from bridge on State Highway 191 at west edge of Stryker, 0.6 mile upstream from Penn Central bridge, and 1.6 miles downstream from Leatherwood Creek.

DRAINAGE AREA.--410 sq. mi.

PERIOD OF RECORD.--September 1921 to September 1928 (published as "near Stryker"), October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 685.1 above mean sea level. Prior to Sept. 30, 1928, nonrecording gage at site 3.5 miles downstream at different datum. Oct. 13, 1940, to Jan. 17, 1941, nonrecording gage and Jan. 18, 1941, to Sept. 30, 1953, water-stage recorder, at site 0.5 mile downstream at same datum.

AVERAGE DISCHARGE.--38 years, 305 cfs (10.10 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,950 cfs Feb. 21 (gage height, 13.77 ft); minimum 6.5 cfs Sept. 1. Period of record: Maximum discharge, 6,640 cfs Apr. 25, 1950; maximum gage height, 16.16 ft May 1, 1956; minimum discharge, 3.6 cfs Aug. 30, 31, 1953. Flood in March 1913 reached a stage of 16.0 ft, from floodmarks (discharge, 7,600 cfs). Flood in 1937 reached a stage of 15.0 ft, from information by local resident (discharge, 6,000 cfs).

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1144: 1922-28. WSP 1387: 1925. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	52	1,360	130	50	1,500	289	107	86	34	21	7.0
2	46	68	1,410	130	48	1,240	344	105	137	32	20	10
3	41	84	1,150	120	46	1,010	414	103	258	30	18	13
4	38	110	915	130	66	804	423	99	236	28	19	19
5	35	152	733	200	722	625	365	96	173	29	21	18
6	31	144	589	218	856	495	310	135	145	33	19	23
7	29	131	474	165	1,040	519	275	196	266	40	16	18
8	28	117	360	142	1,490	566	250	196	277	40	15	18
9	26	96	296	136	1,300	575	232	172	204	36	14	17
10	42	116	264	120	1,000	466	220	146	148	32	13	15
11	98	202	247	110	820	377	203	124	117	36	17	13
12	124	248	266	100	707	328	193	116	112	41	18	11
13	123	236	325	94	614	380	191	108	302	33	16	11
14	158	213	367	88	551	564	208	104	424	27	14	11
15	297	184	357	84	468	888	235	100	450	25	13	11
16	335	166	316	80	356	1,280	234	94	287	25	12	9.8
17	293	153	286	76	348	1,520	214	89	170	29	12	9.0
18	196	139	279	74	666	1,360	200	85	121	29	11	8.5
19	121	124	317	72	986	1,090	189	80	97	109	11	8.0
20	68	178	526	70	2,330	912	176	76	81	220	10	16
21	64	383	618	68	2,910	784	167	73	71	89	9.3	26
22	52	494	639	66	2,730	702	159	70	64	42	9.2	27
23	60	498	540	64	2,570	611	148	66	59	31	10	20
24	58	401	404	62	2,310	520	135	67	57	27	9.9	16
25	56	268	220	62	2,020	432	125	133	53	31	9.5	15
26	54	202	200	60	1,950	360	120	199	49	29	9.0	14
27	52	175	180	58	1,800	320	113	179	46	27	8.0	16
28	50	364	170	58	1,640	302	110	144	43	25	8.0	20
29	48	676	160	56	-----	304	112	120	40	23	8.9	22
30	46	974	150	54	-----	307	111	105	37	22	8.5	21
31	45	-----	140	52	-----	296	-----	96	-----	22	7.5	-----
TOTAL	2,778	7,350	14,258	2,999	32,394	21,437	6,465	3,583	4,610	1,276	607.4	463.3
MEAN	89.6	235	460	96.7	1,157	692	216	116	154	41.2	13.1	15.4
MAX	335	974	1,410	218	2,910	1,520	423	199	450	220	21	27
MIN	26	52	140	52	46	296	110	66	37	22	7.5	7.0
CFSM	.22	.60	1.12	.24	2.82	1.69	.53	.28	.38	.10	.62	.64
IN.	.25	.67	1.29	.27	2.99	1.95	.59	.33	.42	.12	.64	.64
CAL. YR 1970	TOTAL	112,962.8	MEAN	309	MAX	1,020	MIN	13	CFSM	.75	IN	10.25
CTR. YR 1971	TOTAL	98,020.7	MEAN	249	MAX	2,910	MIN	7.5	CFSM	.66	IN	8.89

PEAK DISCHARGE (BASE, 1,950 CFS).--Feb. 21 (2000) 2,950 cfs (13.77 ft).

04186500 Auglaize River near Fort Jennings, Ohio

LOCATION.--Lat 40°56'55", long 84°15'58", in SE 1/4 sec. 15, T.18., R.5E., Putnam County, on left bank 200 ft upstream from bridge on U.S. Highway 224, 3.5 miles northeast of Fort Jennings, 6 miles upstream from Ottawa River, and 7.3 miles downstream from Jennings Creek.

DRAINAGE AREA.--332 sq mi.

PERIOD OF RECORD.--August 1921 to December 1935, October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 713.6 ft above mean sea level. Prior to Oct. 6, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years, 277 cfs.

EXTREMES.--Current year: Maximum discharge, 3,980 cfs Feb. 24 (gage height, 12.77 ft); minimum, 12 cfs Oct. 5, 6.

Period of record: Maximum discharge, about 12,000 cfs Jan. 23, 1959; maximum gage height, 20.30 ft Jan. 23, 1959, from flood-mark (ice jam); minimum discharge, 4.5 cfs Oct. 7, 1956, minimum gage height, 0.75 ft Aug. 28, 1932.

REMARKS.--Records good. Some diversion from Grand Lake to Auglaize River basin through Miami and Erie Canal into Jennings Creek at a point 9.2 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 744: 1932. WSP 974: 1930(M). WSP 1307: 1922-24(M), 1926-27(M), 1929(M). WSP 1912. Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	48	44	17	393	61	45	157	164	54	23
2	16	17	34	42	16	249	68	45	463	134	46	24
3	15	19	29	40	15	195	68	45	2,000	90	40	41
4	14	19	26	64	26	131	52	42	2,560	64	37	45
5	13	17	24	124	523	109	50	41	1,180	52	33	58
6	13	18	21	152	1,140	100	71	342	424	47	32	72
7	14	18	19	106	883	166	58	1,070	296	42	30	259
8	15	19	19	69	373	288	47	1,390	256	39	28	200
9	14	18	18	57	162	208	44	1,820	192	38	27	87
10	17	22	18	47	132	170	46	802	149	53	27	49
11	20	23	19	42	110	178	48	379	122	60	36	35
12	16	21	70	38	100	271	56	242	104	581	40	27
13	23	20	139	34	92	735	56	286	95	750	42	25
14	29	20	124	32	86	1,160	66	250	93	353	34	24
15	30	22	114	30	80	1,060	78	159	113	196	29	24
16	24	21	88	28	78	1,200	83	102	85	123	25	24
17	23	19	76	24	78	723	53	73	67	85	24	23
18	20	21	71	24	110	391	43	57	57	62	24	22
19	19	21	76	23	1,600	310	35	54	50	50	23	22
20	18	24	75	22	2,460	377	38	63	44	49	24	29
21	19	27	66	21	2,570	315	38	53	43	40	27	254
22	19	23	63	23	1,900	255	38	55	41	38	24	232
23	18	21	79	24	3,280	216	35	72	42	36	24	117
24	18	19	130	23	3,250	169	35	49	40	41	27	60
25	17	22	110	22	874	124	34	1,200	39	209	25	43
26	17	19	90	22	678	92	52	2,660	539	301	22	30
27	16	19	74	21	1,060	71	50	1,880	1,440	219	21	318
28	16	20	64	21	820	63	48	590	620	126	21	371
29	17	37	54	20	-----	60	43	353	295	107	22	159
30	18	69	50	19	-----	63	44	291	186	81	21	79
31	17	-----	46	18	-----	53	-----	193	-----	68	21	-----
TOTAL	562	670	1,438	1,270	22,513	9,400	1,538	14,769	11,792	6,320	914	2,701
MEAN	18.1	22.0	62.5	41.2	864	310	51.3	474	393	139	29.5	86.7
MAX	30	69	139	152	3,280	1,200	63	2,660	2,560	750	54	371
MIN	13	15	18	18	15	53	34	41	39	34	21	22

CAL YR 1970 TOTAL 87,898 MEAN 241 MAX 5,040 MIN 12
 8TH YR 1971 TOTAL 72,422 MEAN 208 MAX 3,280 MIN 13

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
8-23	0800	11.12	2,700	8-26	1200	11.24	2,700
8-24	0830	12.77	3,480				

04187500 Ottawa River at Allentown, Ohio

LOCATION.--Lat 40°45'18", long 84°11'41", in NW 1/4 sec. 29, T.38., R.6E., Allen County, on left bank at upstream side of bridge on State Highway 81 at Allentown, 0.3 mile downstream from Kessler Run, and 1.5 miles upstream from McBride Ditch.

DRAINAGE AREA.--160 sq mi.

PERIOD OF RECORD.--October 1923 to December 1935, August 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 789.14 ft above mean sea level. Prior to Oct. 1, 1925, non-recording gage and Oct. 1, 1925, to Dec. 30, 1935, water-stage recorder, at site 35 ft downstream at same datum.

AVERAGE DISCHARGE.--40 years, 121 cfs (10.27 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,130 cfs June 2 (gage height, 6.93 ft); minimum daily discharge, 18 cfs Jan. 2. Period of record: Maximum discharge, 7,740 cfs Jan. 22, 1959 (gage height, 10.88 ft), from rating curve extended above 4,800 cfs; minimum, 1.4 cfs June 28, 29, 1933. Flood of Mar. 15, 1939, reached a stage of 10.1 ft (discharge, 6,160 cfs) and flood of May 1943 a stage of about 10 ft (discharge about 6,000 cfs).

REMARKS.--Records fair prior to May 19, good thereafter. Diurnal fluctuation and some regulation caused by operation of water-supply and sewage-treatment plants of city of Lima upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1004: 1924. WSP 1144: 1944(M). WSP 1207: 1927. WSP 1387: 1924(M), 1927-28(M), 1929, 1930(M), 1935(M). WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	21	30	18	18	97	39	30	85	41	35	36
2	25	21	27	18	18	58	57	32	1,000	30	33	37
3	23	26	26	19	27	50	44	34	1,350	34	34	43
4	22	22	24	132	124	35	49	32	359	31	32	57
5	21	22	22	55	719	34	51	32	154	29	34	58
6	21	21	21	34	166	66	42	358	126	31	36	57
7	22	21	20	29	53	190	39	514	99	27	33	63
8	23	21	23	26	30	151	36	728	91	26	31	40
9	26	26	23	24	28	69	33	605	61	37	32	37
10	40	34	22	23	26	93	33	232	49	71	33	33
11	25	23	44	22	24	118	44	87	45	320	94	33
12	30	22	42	23	23	140	43	127	47	202	41	30
13	61	21	54	22	22	560	52	132	44	58	37	29
14	20	21	30	45	21	506	72	93	197	41	26	31
15	37	37	33	32	20	650	40	71	129	34	32	32
16	24	26	30	20	20	572	46	77	53	34	31	30
17	27	23	03	26	54	293	44	61	30	43	32	30
18	29	24	30	25	160	185	40	51	30	32	29	30
19	22	24	32	24	615	166	37	44	34	30	33	27
20	26	43	20	25	637	210	38	57	33	32	40	109
21	41	33	27	25	520	210	41	44	40	32	21	60
22	24	26	43	25	817	136	41	41	35	32	20	36
23	24	22	61	25	908	87	37	39	32	31	30	33
24	23	23	30	24	912	68	37	91	29	322	21	31
25	41	22	29	23	200	54	35	1,880	30	115	21	29
26	19	23	35	22	456	50	33	1,320	531	58	25	52
27	27	22	25	21	918	53	33	446	111	44	47	43
28	21	24	23	20	514	72	40	220	62	30	26	33
29	23	44	21	19	64	33	33	127	60	42	21	32
30	26	61	20	14	61	31	31	152	41	51	21	29
31	60	60	10	10	60	20	60	62	60	60	60	60
TOTAL	800	747	1,000	801	8,078	5,199	1,240	7,807	6,995	2,846	1,507	1,220
MEAN	25.8	24.1	32.3	25.7	259	168	40.0	252	226	88.6	48.3	40.0
MAX	61	44	62	132	908	850	72	1,880	1,350	322	94	109
MIN	19	20	10	19	10	34	33	30	29	26	20	27
CFRQ	1.17	1.16	1.71	1.18	1.81	1.75	1.28	1.58	1.39	1.40	1.22	1.25
1%	1.25	1.19	1.78	1.21	1.88	1.81	1.28	1.52	1.38	1.47	1.28	1.28

CRQ. for 1970: TOTAL 8,000 MEAN 100 MAX 1,000 CFRQ 1.00
 CRQ. for 1971: TOTAL 20,000 MEAN 200 MAX 1,000 CFRQ 1.00

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	5. %	DISCHARGE	DATE	TIME	5. %	DISCHARGE
1970	1971	BASE	BASE	1970	1971	BASE	BASE

STREAMS TRIBUTARY TO LAKE ERIE

181

04189000 Blanchard River near Findlay, Ohio

LOCATION.--Lat 41°03'21", long 83°41'17", on east line of sec. 10, T.1N., R.10E., Hancock County, on left bank at upstream side of county road bridge, 2 miles west of Findlay, 3 miles downstream from Eagle Creek, and 3 miles upstream from Aured Run.

DRAINAGE AREA.--346 sq mi.

PERIOD OF RECORD.--October 1923 to December 1935, October 1940 to current year. Monthly discharge only for October 1923, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 754.55 ft above mean sea level. Prior to July 24, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 234 cfs (9.16 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,540 cfs Feb. 23 (gage height, 9.37 ft); minimum 8.2 Aug. 22, Sept. 19. Period of record: Maximum discharge, 15,000 cfs Feb. 11, 1959 (gage height, 16.76 ft); minimum, 0.4 cfs Aug. 26, 27, Sept. 3, 1934.

Flood in March 1913 reached a stage of 18.5 ft (discharge, 22,000 cfs, from rating curve extended above 10,000 cfs).

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 974: 1942. WSP 1054: 1927-30, 1933(M) 1945. WSP 1387: 1926, 1928(M) 1930(M), 1952. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	50	22	17	393	81	41	138	31	19	11
2	12	19	39	21	16	265	86	49	215	23	16	12
3	11	20	33	20	15	215	81	45	327	19	15	13
4	10	19	28	26	80	156	74	43	265	17	15	13
5	10	17	23	130	1,320	146	63	45	199	16	14	11
6	11	17	21	80	876	158	61	1,100	166	18	13	13
7	12	17	21	60	460	463	81	1,620	161	17	13	14
8	13	16	20	40	213	456	79	1,340	128	17	10	13
9	13	16	19	32	99	274	72	984	104	18	11	11
10	14	19	16	29	58	292	66	519	88	26	13	11
11	12	17	32	27	50	268	57	256	77	118	36	13
12	16	18	203	25	44	286	59	182	77	27	14	9.7
13	28	18	320	27	40	860	77	193	86	22	11	9.6
14	21	18	277	36	36	1,190	81	163	77	22	11	10
15	14	21	169	31	33	1,440	88	102	74	26	9.4	11
16	16	19	88	28	30	1,300	109	88	90	23	11	10
17	15	19	78	26	30	732	95	131	66	22	11	11
18	16	18	100	24	60	467	86	116	49	18	12	10
19	16	18	78	23	1,300	425	74	116	41	26	12	8.7
20	17	23	68	22	2,500	617	68	109	34	26	12	70
21	20	21	62	21	1,960	505	68	86	35	17	12	15
22	17	19	58	23	1,780	365	68	80	33	16	9.5	12
23	16	18	60	24	3,210	277	63	100	33	16	9.3	12
24	16	17	170	23	1,870	201	59	120	30	79	11	12
25	14	16	95	22	764	153	51	2,180	28	25	11	11
26	16	15	60	22	884	121	49	1,940	27	22	17	15
27	18	19	40	21	1,070	99	47	720	31	28	14	29
28	18	44	30	21	740	116	51	316	28	27	10	15
29	18	71	25	20	-----	111	49	204	35	22	8.8	13
30	25	56	24	19	-----	90	45	204	31	26	9.5	12
31	17	-----	23	18	-----	88	-----	166	-----	22	10	-----
TOTAL	489	660	2,332	963	19,555	12,529	2,088	13,358	2,773	832	400.5	431.0
MEAN	15.8	22.0	75.2	31.1	698	404	69.6	431	92.4	26.8	12.9	14.4
MAX	28	71	320	130	3,210	1,440	109	2,180	327	118	36	70
MIN	10	15	18	18	15	88	45	41	27	16	8.8	8.7
CFSM	.05	.06	.22	.09	2.02	1.17	.20	1.25	.27	.08	.04	.04
IN.	.05	.07	.25	.10	2.10	1.35	.22	1.44	.30	.09	.04	.05
CAL YR 1970	TOTAL 89,264.0		MEAN 245		MAX 3,930		MIN 8.5		CFSM .71		IN 9.60	
WTR YR 1971	TOTAL 56,410.5		MEAN 155		MAX 3,210		MIN 8.7		CFSM .45		IN 6.06	

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-20	1400	7.67	2,720	5-25	2100	8.43	3,000
2-23	1000	9.37	3,540				

STREAMS TRIBUTARY TO LAKE ERIE

04191500 Auglaize River near Defiance, Ohio

LOCATION.—Lat 41°14'15", long 84°23'57", in NE 1/4 sec. 9, T.3N., R.4E., Defiance County, on right bank 125 ft downstream from dam of Toledo Edison Co., 0.2 mile upstream from Jackson ditch, and 3 miles south of Defiance.

DRAINAGE AREA.—2,318 sq mi.

PERIOD OF RECORD.—May to August 1903 (gauge heights only), April 1915 to current year. Monthly discharge only for some periods, published in WSP 1307.

GAGE.—Water-stage recorder. Datum of gage is 659.70 ft above mean sea level. May 20 to Aug. 8, 1903, nonrecording gage at site 1.8 miles downstream at different datum. Apr. 13, 1915, to Dec. 6, 1933, nonrecording gage near right bank on upstream side of dam at datum 6.00 ft higher. Auxiliary tailwater staff gage near right bank on downstream side of dam at present datum.

AVERAGE DISCHARGE.—56 years, 1,658 cfs.

EXTREMES.—Current year: Maximum discharge, 15,200 cfs Mar. 16 (gage height, 14.60 ft); minimum 28 cfs Mar. 3 (gage-height 5.05 ft), result of gate operation.

Period of record: Maximum discharge, 52,500 cfs Feb. 16, 1950, Feb. 12, 1959 (gage height, 26.4 ft, from graph based on hourly powerplant tailwater-gage readings and gage readings, respectively); maximum gage height, 27.65 ft Feb. 13, 1959, from floodmark (ice jam); minimum daily discharge, 0.5 cfs Oct. 13, 14, 1952 (during repairs to powerplant dam).

Flood in March 1913 reached a stage of 38.8 ft, from reading on powerplant tailwater gage at present datum (discharge, 120,000 cfs, from rating curve extended above 51,000 cfs).

REMARKS.—Records good. Flow regulated by dam at former powerplant 125 ft upstream from station (reservoir capacity, 9,800 acre-ft), operation of plant discontinued Jan. 10, 1963; occasional gate operation subsequently. Some diversion by Miami & Erie Canal from Grand Lake into Jennings Creek, tributary to Auglaize River 70 miles upstream from station. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 954: 1941. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	98	1,670	270	100	5,010	536	243	865	459	237	69
2	146	107	1,230	250	85	3,200	552	243	1,020	385	204	124
3	101	115	884	230	74	865	544	243	5,500	337	160	139
4	79	101	682	351	138	1,240	560	243	6,110	279	146	166
5	76	119	560	716	3,650	1,110	505	250	6,060	232	138	203
6	69	127	400	620	5,320	1,000	459	3,000	2,630	170	123	265
7	64	98	330	690	4,950	1,380	459	9,000	1,710	151	115	358
8	62	101	285	584	3,310	2,170	444	9,790	775	146	107	686
9	71	119	237	444	1,860	2,050	400	9,950	1,030	146	104	572
10	119	134	193	358	1,080	1,740	371	7,480	874	160	115	370
11	88	119	210	304	690	1,600	364	3,170	674	310	107	240
12	115	134	414	267	544	2,120	337	2,370	544	528	123	171
13	127	130	1,730	250	536	4,690	324	1,600	474	1,190	160	141
14	170	115	2,160	230	530	8,180	444	1,370	436	1,060	150	121
15	267	138	1,600	210	500	10,800	568	1,120	474	624	137	95
16	298	160	1,140	200	480	12,000	592	838	568	422	128	85
17	267	142	884	180	580	7,040	560	674	458	279	108	83
18	221	146	802	170	2,120	6,220	505	584	358	232	96	77
19	170	142	865	160	7,180	4,710	451	505	298	215	95	78
20	151	215	932	150	11,500	3,570	393	466	273	184	85	117
21	138	179	829	150	13,500	3,520	351	444	226	160	80	181
22	127	260	758	155	13,300	3,130	351	429	210	146	80	537
23	130	215	690	165	13,100	2,480	358	393	204	130	63	517
24	127	146	741	160	13,500	1,810	298	393	188	165	73	366
25	119	160	640	160	11,400	1,360	285	2,310	184	330	70	255
26	115	155	500	150	9,980	1,060	260	7,340	248	584	65	213
27	111	160	420	150	10,200	865	260	9,950	2,290	560	58	196
28	104	358	380	140	8,510	741	260	5,990	2,320	474	7	523
29	107	884	340	130	-----	690	226	2,780	1,160	358	7	614
30	101	1,520	320	120	-----	657	237	1,700	682	291	71	425
31	104	-----	300	110	-----	600	-----	608	-----	260	60	-----
TOTAL	4,104	6,597	23,126	8,424	138,717	97,608	12,254	85,476	38,843	10,967	3,391	7,987
MEAN	132	220	746	272	4,954	3,149	408	2,757	1,295	354	109	266
MAX	298	1,520	2,160	820	13,500	12,000	592	9,950	6,110	1,190	237	686
MIN	62	98	193	110	74	600	226	243	184	130	58	69
CAL YR 1970	TOTAL 621,341	MEAN 1,702	MAX 17,300	MIN 36								
WTR YR 1971	TOTAL 437,494	MEAN 1,199	MAX 13,500	MIN 58								

PEAK DISCHARGE (BASE, 13,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-21	1430	13.98	13,800	3-16	0700	14.60	15,200

04192500 Maumee River near Defiance, Ohio

LOCATION.--Lat 41°17'31", long 84°16'52", in NW 1/4 sec. 22, T.4N., R.5E., Defiance County, on left bank 40 ft upstream from Independence Dam, 4 miles downstream from Auglaize River, and 4.5 miles east of Defiance.

DRAINAGE AREA.--5,545 sq mi.

PERIOD OF RECORD.--October 1924 to December 1935, March 1939 to current year.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 658.56 ft (revised) above mean sea level. Prior to Nov. 13, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years, 3,952 cfs.

EXTREMES.--Current year: Maximum discharge, 37,000 cfs Feb. 21 (gage height, 7.29 ft); minimum 149 cfs Aug. 31 (gage height, 1.51 ft).
Period of record: Maximum discharge, 87,100 cfs Feb. 16, 1950 (gage height, 13.70 ft); maximum gage height, 13.77 ft Feb. 11, 1959 (ice jam); minimum discharge, 2 cfs Sept. 3, 1925; minimum gage height, 1.09 ft Sept. 26, 1928.

REMARKS.--Records good. Flow affected by occasional regulation of Auglaize River at hydroelectric plant of Toledo Edison Company, (operation of plant discontinued Jan. 10, 1963) 7 miles upstream. Low flow slightly regulated by powerplant at Fort Wayne, Ind. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WBP 974: 1926-27, 1930. WBP 1387: 1925-28, 1946. WRD Ohio, 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	545	735	8,310	1,150	438	17,100	2,110	910	2,500	857	470	169
2	483	755	6,430	1,190	385	12,600	2,200	917	3,000	798	430	276
3	412	775	5,270	1,070	319	8,370	2,490	867	9,190	800	380	307
4	342	844	4,500	1,180	527	7,000	2,460	964	10,900	749	350	310
5	319	959	4,320	1,620	6,750	5,990	2,310	969	10,100	653	330	439
6	289	959	3,370	2,100	13,300	4,920	2,160	7,790	6,790	492	300	504
7	407	844	2,480	1,640	13,900	5,330	2,060	16,200	4,150	425	280	534
8	319	735	2,040	1,490	11,100	6,430	1,790	16,800	3,030	405	260	840
9	260	755	1,670	1,250	7,420	5,860	1,610	15,700	3,500	400	220	947
10	378	775	1,390	1,140	5,270	5,050	1,590	13,400	3,310	438	220	762
11	378	735	1,280	1,040	4,430	4,350	1,420	7,870	2,410	698	260	583
12	655	867	1,540	957	4,390	4,800	1,300	5,590	1,790	818	308	446
13	575	890	3,280	869	4,260	8,490	1,270	4,450	1,450	1,570	422	367
14	595	890	4,250	837	3,810	14,000	2,200	3,720	1,340	1,780	363	344
15	1,180	867	3,740	781	3,580	17,300	2,180	3,100	1,480	1,540	324	318
16	2,330	867	3,130	745	3,160	21,700	1,660	2,420	1,530	1,090	315	291
17	1,800	821	2,640	716	3,240	18,900	1,990	1,900	1,330	861	292	275
18	1,340	775	2,370	651	6,700	13,100	1,780	1,700	1,160	701	252	286
19	1,080	755	2,920	598	14,900	11,300	1,610	1,530	1,010	583	244	275
20	867	936	4,540	562	24,600	11,000	1,520	1,270	846	1,040	220	374
21	775	1,450	4,410	556	31,400	10,700	1,450	1,240	811	879	217	383
22	675	2,330	4,200	569	28,900	9,450	1,210	1,140	684	616	229	914
23	675	2,220	3,240	573	27,400	7,830	984	1,100	621	469	214	862
24	615	1,820	3,280	551	27,300	6,210	1,040	1,040	593	615	195	603
25	615	1,510	2,820	530	25,000	4,880	1,090	2,960	604	648	225	481
26	575	1,260	2,190	538	24,400	3,900	909	9,810	592	975	324	481
27	558	1,090	1,750	505	23,900	3,290	1,040	13,300	2,360	865	233	493
28	508	1,780	1,530	498	21,700	2,840	1,040	9,620	3,100	737	207	823
29	508	4,640	1,450	429	-----	2,480	945	5,720	1,740	607	213	1,780
30	525	8,240	1,360	435	-----	2,470	997	4,090	1,120	551	185	1,540
31	675	-----	1,300	440	-----	2,250	-----	2,380	-----	520	165	-----
TOTAL	21,258	42,879	97,000	27,210	344,499	259,890	48,415	160,467	83,041	24,180	8,667	17,007
MEAN	686	1,429	3,119	878	12,300	8,384	1,614	5,176	2,768	780	280	567
MAX	2,330	8,240	8,310	2,100	31,400	21,700	2,490	16,800	10,900	1,780	470	1,780
MIN	260	735	1,280	429	319	2,250	909	867	592	400	165	169

CAL YR 1970 TOTAL 1,426,763 MEAN 3,909 MAX 30,600 MIN 193
WTR YR 1971 TOTAL 1,134,513 MEAN 3,108 MAX 31,400 MIN 165

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-21	1400	7.29	37,000	3-16	1200	5.95	24,900

04193500 Maumee River at Waterville, Ohio

LOCATION.--Lat 41°30'00", long 83°42'46", Lucas County, on downstream side of second pier from left end of bridge on State Highway 64 at Waterville, 3 miles downstream from Tontogany Creek, and 21.1 miles above the mouth.

DRAINAGE AREA.--5,330 sq mi.

PERIOD OF RECORD.--November 1898 to December 1901, August 1921 to December 1935, March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft above mean sea level. Nov. 19, 1898, to Dec. 31, 1901, Aug. 26, 1921 to July 31, 1930, nonrecording gage, Aug. 1, 1930 to Dec. 31, 1935, water-stage recorder, Mar. 14, 1939 to Mar. 12, 1940 nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years (1921-35, 1939-71) 4,668 cfs (10.04 inches per year) (includes flow in Miami & Erie Canal at Waterville 1922-29; canal was abandoned in 1929 and was filled in prior to March 1939).

EXTREMES.--Current year: Maximum discharge, 57,700 cfs Feb. 22 (gage height, 11.59 ft); minimum daily 170 cfs Aug. 31. Period of record: Maximum discharge, 94,000 cfs Feb. 16, 1950 (gage height, 14.52 ft); maximum gage height, 16.17 ft Feb. 12, 1959 (ice jam); practically no flow at times prior to June 30, 1929, when entire river flow was being diverted by canal; minimum since canal was abandoned, 20 cfs Oct. 23, 24, 1964 (gage height, 1.29 ft). Flood in March 1913 reached a stage of 19.9 ft, from information by local resident (estimated discharge, 180,000 cfs, from rating curve extended above 94,000 cfs).

REMARKS.--Records good except those for the winter period, and June 28 to Sept. 30, which are fair. Low flow slightly regulated by powerplants upstream from station. Small diversion upstream from gage into Portage River basin (see Station No. 04195500). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 894: 1930(M). WSP 1084: 1946. WSP 1387: 1900(M), 1922-23, 1933. WRD Ohio 1968: 1967. WRD Ohio 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	685	1,010	10,500	1,500	560	18,600	2,460	1,190	3,040	1,300	560	220
2	715	942	8,000	1,400	540	13,900	2,710	884	4,100	1,100	560	340
3	576	1,090	6,200	1,400	520	10,200	2,650	1,030	7,800	1,000	500	360
4	404	1,020	5,400	1,550	660	6,440	2,680	1,030	13,700	1,000	420	390
5	339	1,180	5,190	2,680	12,600	5,850	2,550	1,010	10,700	900	390	520
6	331	1,190	4,190	3,040	10,700	4,840	2,440	3,360	10,200	700	370	580
7	325	1,050	3,270	2,700	16,300	5,540	2,300	19,700	6,060	500	330	660
8	414	992	2,630	2,300	13,700	5,920	2,100	21,600	4,610	400	300	860
9	342	920	2,250	1,900	11,000	5,780	1,900	19,900	3,570	440	270	1,000
10	499	1,150	1,660	1,600	7,400	5,080	1,800	18,000	4,060	560	240	1,200
11	444	1,030	1,570	1,400	5,600	4,350	1,700	11,800	3,330	860	330	740
12	627	1,070	1,950	1,300	5,000	4,190	1,600	7,160	2,900	1,300	400	660
13	801	1,110	3,540	1,200	4,800	6,960	1,500	5,820	2,570	1,600	520	540
14	785	1,110	5,260	1,100	4,500	13,300	2,700	4,740	2,050	1,800	440	420
15	1,100	1,230	4,500	1,000	4,110	18,800	2,300	4,190	1,680	2,100	410	380
16	2,230	1,130	4,000	900	3,700	22,200	1,900	3,390	1,780	1,800	380	360
17	2,650	956	3,600	800	3,500	21,200	2,500	2,630	1,640	1,300	350	340
18	1,930	992	3,420	800	6,360	15,800	3,000	2,280	1,390	950	310	330
19	1,430	974	4,260	760	13,400	11,800	2,300	2,000	1,190	820	280	380
20	1,200	1,450	6,000	740	28,000	11,600	1,900	1,730	1,030	1,300	250	440
21	1,150	1,500	5,600	720	28,400	10,800	1,700	1,500	798	1,100	260	500
22	944	2,790	5,000	700	38,900	10,200	1,500	1,280	750	900	270	600
23	858	2,930	4,500	700	29,900	8,560	1,300	1,320	642	700	250	1,000
24	813	2,180	4,000	700	28,600	6,640	1,050	1,500	572	640	230	700
25	803	1,800	3,500	700	26,400	5,360	1,200	3,070	586	800	300	560
26	828	1,500	3,000	680	27,900	4,510	1,110	9,240	492	950	370	500
27	740	1,300	2,600	660	27,800	3,940	992	15,300	750	1,100	400	600
28	737	2,000	2,300	640	23,900	3,540	1,520	13,900	3,180	950	300	620
29	753	4,450	2,000	620	-----	3,100	920	8,120	3,900	800	230	1,100
30	760	8,970	1,850	600	-----	2,650	992	5,680	2,200	700	200	1,900
31	912	-----	1,700	580	-----	2,630	-----	3,750	-----	640	170	-----
TOTAL	27,125	51,016	123,440	37,370	390,740	274,280	57,274	198,104	101,270	31,010	10,590	18,900
MEAN	875	1,701	3,982	1,205	13,960	8,848	1,909	6,390	3,376	1,000	342	630
MAX	2,650	8,970	10,500	3,040	38,900	22,200	3,000	21,600	13,700	2,100	560	1,900
MIN	325	920	1,570	580	520	2,630	920	884	492	400	170	220
CFSM	.14	.27	.63	.19	2.21	1.40	.30	1.01	.53	.16	.05	.10
IN.	.16	.30	.73	.22	2.30	1.61	.34	1.16	.60	.18	.06	.11

CAL YR 1970 TOTAL 1,673,744 MEAN 4,586 MAX 33,300 MIN 114 CFSM .72 IN 9.84
WTR YR 1971 TOTAL 1,321,119 MEAN 3,620 MAX 38,900 MIN 170 CFSM .57 IN 7.76

Note: Doubtful gage-height record Mar. 11 to Apr. 8, June 28 to Sept. 30.

STREAMS TRIBUTARY TO LAKE ERIE

185

04195500 Portage River at Woodville, Ohio

LOCATION.--Lat 41°26'58", long 83°21'41", in sec. 28, T.6N., R.13E., Sandusky County, on left bank at upstream side of bridge on U.S. Highway 20 in Woodville, 600 ft downstream from unnamed right bank tributary, and 10.3 miles upstream from Sugar Creek.

DRAINAGE AREA.--428 sq mi.

PERIOD OF RECORD.--July 1928 to December 1935, October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.75 ft above mean sea level. Prior to Oct. 8, 1933, nonrecording gage, Oct. 9, 1933, to Dec. 31, 1935, water-stage recorder, Oct. 17 to Nov. 29, 1939, nonrecording gage, all at same site and datum.

AVERAGE DISCHARGE.--(Adjusted for diversion).--39 years, 297 cfs (9.42 inches per year).

EXTREMES.--Current year: Maximum discharge, 4,260 cfs June 7 (gage height, 8.92 ft); maximum gage height 8.95 ft Feb. 20 (ice jam); minimum, 5.2 cfs Aug. 10.

Period of record: Maximum discharge, 11,500 cfs Feb. 15, 1950 (gage height, 14.51 ft); minimum, 0.3 cfs Aug. 28, 1931.

Flood in March 1913 reached a stage of 17 ft, from information by local residents (discharge, 17,000 cfs, from rating curve extended above 11,500 cfs).

REMARKS.--Records good, except those for the winter period, which are fair. Flow supplemented by water imported from Maumee River basin for municipal supply for city of Bowling Green 16 miles upstream. The importation of this water began Sept. 1, 1951. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 694: 1929-30. WSP 1207: 1933. WSP 1387: 1931, 1933. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	22	389	62	20	735	109	73	123	95	30	6.4
2	18	21	216	58	20	520	121	69	172	54	22	7.9
3	15	19	141	56	19	380	133	68	778	38	16	11
4	11	21	138	95	35	270	114	73	477	28	12	15
5	9.3	22	279	338	888	230	95	77	278	22	11	13
6	7.0	20	153	396	1,210	210	83	224	2,430	18	11	13
7	7.0	19	89	220	455	510	81	1,550	3,660	16	10	13
8	7.4	18	84	140	220	640	82	742	1,820	14	8.6	14
9	9.0	17	62	98	140	359	79	526	722	15	7.7	14
10	7.5	16	52	70	120	398	70	334	383	18	6.6	13
11	6.7	19	54	50	100	352	61	221	238	28	9.3	13
12	9.6	20	165	44	86	339	54	174	943	240	26	11
13	15	19	986	38	100	812	58	154	1,260	137	30	12
14	31	18	714	36	110	1,150	91	131	657	65	18	12
15	54	19	437	34	100	1,500	128	110	357	43	13	10
16	77	19	308	33	90	1,910	120	98	210	37	10	8.8
17	56	21	316	32	100	1,090	114	106	142	35	7.8	10
18	38	21	476	31	140	636	107	107	105	22	7.1	11
19	27	19	491	30	460	520	93	101	83	27	7.4	10
20	22	23	501	29	2,000	559	80	90	67	308	8.6	22
21	22	28	359	28	1,400	492	82	97	55	364	14	51
22	26	35	263	27	992	402	91	85	84	182	25	73
23	25	39	236	26	2,120	336	92	69	61	98	16	40
24	22	29	267	25	1,300	277	85	66	46	66	17	25
25	20	26	190	24	634	231	80	852	38	131	11	19
26	18	23	140	24	1,560	199	75	1,910	32	159	9.0	17
27	16	22	120	24	2,180	184	70	947	28	88	8.1	160
28	15	56	100	23	1,500	170	71	443	24	55	8.6	225
29	15	173	88	23	-----	167	72	284	29	38	11	100
30	16	394	78	22	-----	145	75	202	137	30	9.1	54
31	20	-----	70	21	-----	121	-----	154	-----	28	7.5	-----
TOTAL	668.1	1,216	7,962	2,157	18,099	15,844	2,666	10,137	15,439	2,499	408.4	1,004.1
MEAN	21.6	40.6	257	69.6	646	511	88.9	327	515	80.6	13.2	33.5
MAX	77	394	986	396	2,180	1,910	133	1,910	3,660	364	30	225
MIN	6.7	16	52	21	19	121	54	66	24	14	6.6	6.4
(*)	4.48	4.14	3.71	4.26	4.46	4.32	4.83	4.80	5.12	5.02	5.26	5.98
MEAN #	17.1	36.5	253	65.3	642	507	84.1	322	510	75.6	7.94	27.5
CFSM #	.04	.09	.59	.15	1.50	1.18	.20	.75	1.19	.18	.02	.06
IN #	.05	.10	.68	.18	1.56	1.37	.22	.87	1.32	.20	.02	.07

CAL YR 1970 TOTAL 107,677.6 MEAN 295 MAX 4,650 MIN 5.8 (*) 4.31 MEAN # 292 CFSM # .68 IN # 9.24
WTR YR 1971 TOTAL 78,229.6 MEAN 214 MAX 3,660 MIN 6.4 (*) 4.70 MEAN # 209 CFSM # .49 IN # 6.65

PEAK DISCHARGE (BASE, 3,500 CFS).--June 7 (0430) 4,260 cfs (8.92 ft).

(*) Diversion from Maumee River basin for municipal supply of city of Bowling Green, equivalent in cubic feet per second.

(#) Adjusted for diversion.

STREAMS TRIBUTARY TO LAKE ERIE

04196000 Sandusky River near Bucyrus, Ohio

LOCATION.—Lat 40°48'13", long 83°00'21", in NE 1/4 sec. 10, T.3S., R.16E., Crawford County, on right bank at downstream side of bridge on township road, 1 mile upstream from unnamed left bank tributary, 1.5 miles west of Bucyrus, and 12 miles downstream from Loss Creek.

DRAINAGE AREA.—88.8 sq mi.

PERIOD OF RECORD.—August 1925 to November 1935, July 1936 to December 1951, December 1963 to current year.

GAGE.—Water-stage recorder. Datum of gage is 955.04 ft above mean sea level. Prior to May 11, 1940, nonrecording gage, and May 12, 1940, to December 31, 1951, water-stage recorder, at same site and datum.

AVERAGE DISCHARGE.—30 years (1925-35, 1936-51, 1964-71) 81.2 cfs (12.42 inches per year).

EXTREMES.—Current year: Maximum discharge 1,740 cfs May 7 (gage height, 7.03 ft); minimum, 1.2 cfs Aug. 28.
Period of record: Maximum discharge observed, 5,800 cfs Dec. 14, 1927 (gage height, 9.15 ft); minimum, 0.4 cfs Sept. 29, 1941, July 16, 1942.
Flood of Mar. 23, 1913 reached a stage of 14.5 ft, from floodmarks. Flood of Jan. 22, 1959 reached a stage of 11.9 ft, from floodmarks (discharge, 13,500 cfs, on basis of contracted-opening measurement of peak flow at site 2.8 miles upstream with drainage area of 85.4 sq mi, adjusted to gage site by 0.8 power of drainage-area ratio).

REMARKS.—Records good. Low flow slightly affected by operation of reservoirs 5.3 to 6.0 miles upstream from station, for municipal supply of Bucyrus. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 744: 1925-32. WSP 874: 1936. WSP 1307: 1926(M), 1928(M), 1931, 1932(M), 1934-35(M), 1939, 1940(M), 1946(M). WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	22	173	27	9.0	157	46	11	28	9.8	4.7	5.1
2	8.1	34	99	26	8.0	125	53	9.9	40	10	4.1	3.8
3	6.1	135	74	30	7.5	101	64	10	32	5.0	3.4	2.8
4	9.7	78	221	500	23	73	47	9.6	27	6.1	3.8	3.9
5	5.2	45	163	320	644	64	39	7.8	23	7.7	2.9	3.7
6	5.6	31	87	160	322	96	36	988	125	5.0	2.8	10
7	4.3	24	51	105	105	398	36	876	245	5.5	2.4	23
8	5.5	22	37	51	54	166	31	405	91	3.4	5.1	8.7
9	4.1	19	35	36	36	102	29	245	50	9.3	6.1	4.9
10	7.1	14	32	31	32	114	25	145	35	9.8	6.9	4.1
11	3.4	13	82	27	30	121	22	97	27	170	9.6	8.3
12	13	11	642	24	39	130	23	222	49	151	4.9	2.9
13	124	10	810	26	56	472	32	186	53	48	6.2	7.8
14	151	14	256	61	81	387	39	110	24	21	3.4	5.1
15	192	36	146	87	59	373	41	75	17	9.6	2.2	8.5
16	110	111	104	34	42	378	34	78	17	7.7	2.9	5.3
17	50	56	116	26	102	194	30	169	11	5.7	3.8	5.1
18	27	36	136	21	320	137	28	103	8.9	4.4	3.1	4.3
19	23	27	107	19	491	157	26	72	7.1	7.1	3.0	3.0
20	23	27	91	17	999	213	19	72	9.1	5.2	7.7	29
21	24	32	74	16	399	164	19	62	14	4.9	4.2	11
22	44	30	125	16	694	226	14	43	12	4.1	3.5	9.6
23	47	25	358	16	1,260	155	17	33	11	3.1	6.6	5.5
24	33	20	202	16	300	112	15	42	11	25	6.4	3.5
25	24	16	95	16	203	96	13	278	10	49	6.0	2.5
26	20	14	64	15	472	91	12	197	9.9	25	4.3	4.2
27	14	15	48	14	495	78	11	109	8.8	36	3.0	3.4
28	16	19	40	13	255	70	12	73	6.1	25	2.0	5.8
29	15	71	34	12	-----	67	12	53	5.4	13	7.2	7.6
30	16	404	30	11	-----	54	11	42	10	9.4	7.0	6.3
31	16	-----	28	10	-----	46	-----	34	-----	6.6	5.6	-----
TOTAL	1,053.1	1,415	4,560	1,783	7,537.5	5,117	840	4,857.3	1,013.3	702.4	144.8	208.7
MEAN	34.0	47.2	147	57.5	269	165	28.0	157	33.8	22.7	4.67	6.96
MAX	192	404	810	500	1,260	472	64	988	245	170	9.6	29
MIN	3.4	10	28	10	7.5	46	11	7.8	5.4	3.1	2.0	2.5
CFSM	.38	.53	1.66	.65	3.03	1.86	.32	1.77	.38	.26	.05	.08
IN.	.44	.59	1.91	.75	3.16	2.14	.35	2.03	.42	.29	.06	.19
CAL YR 1970	TOTAL 34,316.5	MEAN 94.0	MAX 1,610	MIN 2.9	CFSM 1.06	IN 14.38						
WTR YR 1971	TOTAL 29,232.1	MEAN 80.1	MAX 1,260	MIN 2.0	CFSM .90	IN 12.25						

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-13	0400	6.33	1,340	5-7	0030	7.03	1,740
2-23	0330	6.86	1,640				

04196500 Sandusky River near Upper Sandusky, Ohio

LOCATION.--Lat 40°51'02", long 83°15'23", in sec. 21, T.2S., R.14E., Wyandot County, on left bank at downstream side of county road bridge, 0.7 mile downstream from unnamed right bank tributary, 0.8 mile upstream from Rock Run, and 2 miles northeast of Upper Sandusky.

DRAINAGE AREA.--298 sq mi.

PERIOD OF RECORD.--October 1921 to December 1935, January 1938 to current year. Gage-height records collected at site 3 miles upstream since 1912 (fragmentary) are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 792.25 ft above mean sea level. Prior to Sept. 14, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years, 235 cfs (10.71 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,340 cfs Feb. 23 (gage height, 7.10 ft) maximum gage height 8.89 ft Feb. 19 (ice jam); minimum 4.1 cfs Sept. 1.

Period of record: Maximum discharge, about 10,000 cfs Jan. 22, 1959; maximum gage height, 15.00 ft in gage well, 15.55 ft from outside floodmark, Jan. 22, 1959 (ice jam); minimum discharge, 0.50 cfs Oct. 2, 1963; minimum gage height, 0.67 ft Sept. 6, 7, 1934.

Flood in June 1937 reached a stage of 14.3 ft, from high-water marks in gage well.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 874: 1927-30, 1933. WSP 1387: 1922(M), 1923-29, 1944. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	26	431	84	30	552	120	46	122	42	24	5.3
2	27	30	235	80	27	197	128	49	115	39	21	10
3	23	49	156	76	24	321	140	52	120	28	17	10
4	19	136	153	120	50	234	140	49	104	23	17	9.4
5	16	99	320	580	1,300	191	115	40	90	20	14	9.4
6	16	67	203	520	2,400	200	102	1,300	154	15	13	9.9
7	16	52	130	300	1,500	645	98	2,700	965	15	11	17
8	14	44	95	190	820	686	96	1,520	509	16	10	22
9	13	38	77	140	560	280	86	987	254	17	10	30
10	15	36	75	110	500	290	81	561	160	18	8.2	17
11	13	32	82	98	460	305	76	373	118	49	14	20
12	18	28	463	90	420	333	69	621	100	357	14	10
13	32	27	1,520	86	430	793	79	795	132	182	18	10
14	142	26	555	92	460	1,190	98	473	128	92	15	12
15	148	29	453	110	440	960	110	305	85	58	12	9.4
16	200	41	297	130	380	1,170	110	224	69	39	11	9.4
17	112	117	250	80	460	735	98	254	56	30	8.2	10
18	65	80	282	72	1,600	473	90	357	48	25	7.0	11
19	47	61	278	66	2,400	405	81	221	41	23	5.3	9.4
20	37	55	231	60	2,600	646	74	174	39	19	6.4	20
21	35	51	194	56	1,860	566	67	155	36	20	7.0	25
22	47	46	203	54	1,550	497	67	135	35	18	7.6	36
23	52	42	540	54	3,200	481	64	106	36	15	12	22
24	64	38	588	54	2,160	345	59	116	35	25	8.2	18
25	52	35	330	52	710	268	55	588	32	31	6.4	14
26	44	32	160	52	1,060	234	52	1,460	33	66	7.0	13
27	35	30	140	50	1,470	212	48	748	32	88	11	12
28	29	32	120	46	1,010	191	46	377	30	86	11	11
29	24	50	110	42	-----	177	48	244	28	64	10	11
30	27	219	100	38	-----	158	48	185	31	40	8.2	10
31	25	-----	92	34	-----	135	-----	148	-----	29	5.9	-----
TOTAL	1,443	1,648	9,267	3,616	29,921	14,070	2,545	15,772	3,739	1,589	350.3	433.2
MEAN	46.5	54.9	299	117	1,069	454	84.8	509	125	51.3	11.3	14.4
MAX	200	219	1,520	580	3,200	1,190	140	2,700	965	357	24	36
MIN	13	26	77	34	24	135	46	46	28	15	5.3	5.3
CFSM	.16	.18	1.00	.39	3.59	1.52	.28	1.71	.42	.17	.04	.05
IN.	.18	.21	1.16	.45	3.74	1.76	.32	1.67	.47	.20	.04	.05

CAL YR 1970 TOTAL 96,659.5 MEAN 265 MAX 3,820 MIN 7.0 CFSM .89 IN 12.07
WTR YR 1971 TOTAL 84,393.5 MEAN 231 MAX 3,200 MIN 5.3 CFSM .78 IN 10.54

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-6-71	Unknown	Unknown	About 2,500	2-23	1000	7.10	3,340
2-20-71	Unknown	Unknown	About 2,000	5-7-71	1830	6.42	2,800

STREAMS TRIBUTARY TO LAKE ERIE

04196800 Tymochtee Creek at Crawford, Ohio

LOCATION.--Lat 40°55'22", long 83°20'56", in SE 1/4 sec. 27, T.18., R.13E., Wyandot County, on right bank at downstream side of bridge on State Highway 199 (formerly U.S. Highway 23), 0.4 mile northwest of Crawford, 1.5 miles downstream from Lick Run, 2.7 miles upstream from Little Tymochtee Creek, and 3 miles southeast of Carey.

DRAINAGE AREA.--229 sq mi.

PERIOD OF RECORD.--Water years 1961-64 (annual maximum), June 1964 to current year. Occasional low-flow measurements, water years 1961-63.

GAGE.--Water-stage recorder. Datum of gage is 785.86 ft above mean sea level. Oct. 1, 1960, to May 31, 1964, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--7 years, 158 cfs (9.37 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,300 cfs Feb. 24 (gage height, 6.98 ft); minimum, 0.09 cfs Aug. 21, 22, 26. Period of record: Maximum discharge, 6,040 cfs Apr. 22, 1964 (gage height, 9.82 ft); maximum gage height, 11.21 ft Mar. 6, 1963 (backwater from ice); no flow Aug. 10, Sept. 13-18, Oct. 23 to Nov. 4, 1964, Aug. 23-26, 1965. Flood of January 1959 reached a stage of 12.9 ft, from information by local resident.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Ohio 1969: 1964(P), 1966(M), 1967(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	4.5	16	16	13	487	54	19	46	7.0	6.3	.23
2	1.0	4.5	7.7	14	12	292	50	20	40	6.3	5.1	.28
3	1.3	2.4	5.7	14	12	227	50	18	38	5.7	3.9	.37
4	1.0	1.5	5.1	41	22	170	51	19	37	5.7	3.4	.32
5	.75	2.9	3.4	84	740	113	48	19	35	5.7	2.9	.41
6	.55	2.4	2.6	365	1,100	107	41	527	34	4.5	2.7	.60
7	.30	2.0	2.3	305	700	289	36	888	28	3.4	1.8	1.0
8	.16	1.3	2.1	132	400	463	33	1,100	34	2.9	1.3	.69
9	.12	1.3	2.0	71	280	316	34	960	27	5.7	.89	.48
10	1.0	1.3	2.2	47	240	206	32	720	25	4.5	.50	.36
11	2.0	1.3	5.7	37	210	198	27	368	21	4.5	2.6	.69
12	2.4	1.6	117	30	200	227	26	245	17	4.5	3.1	1.1
13	4.5	1.6	167	26	190	471	24	499	15	58	2.1	1.5
14	6.3	1.6	180	27	180	750	34	467	13	83	1.3	2.0
15	9.2	2.4	134	25	180	780	40	245	14	48	.78	2.3
16	13	2.4	77	33	170	705	45	156	12	28	.51	2.9
17	10	2.4	64	26	240	616	42	111	12	17	.33	3.2
18	7.0	3.4	62	22	1,010	379	37	86	13	11	.20	2.4
19	5.7	2.9	66	20	1,210	283	34	68	11	8.4	.12	1.5
20	5.7	4.5	64	18	1,360	347	29	58	8.4	8.4	.11	2.4
21	7.7	5.7	53	16	1,080	439	27	51	8.4	7.0	.10	2.3
22	5.7	7.0	52	15	1,240	333	24	45	8.4	5.1	.11	1.7
23	5.7	7.0	93	15	1,350	248	25	39	7.7	3.9	.17	2.3
24	5.7	5.1	100	15	1,860	189	25	38	6.3	7.7	.12	1.9
25	5.1	3.4	52	15	1,330	146	23	383	5.1	6.3	.10	1.4
26	4.5	2.9	38	15	625	119	21	487	5.1	6.3	.14	1.6
27	3.9	4.5	30	15	785	104	20	344	5.7	5.1	.42	2.2
28	3.9	6.3	24	14	780	92	18	180	5.1	5.7	.87	2.0
29	3.9	11	22	14	-----	78	17	106	4.5	5.7	.59	.97
30	4.5	28	20	14	-----	71	16	73	6.3	4.5	.28	.44
31	5.1	-----	18	13	-----	61	-----	56	-----	6.3	.23	-----
TOTAL	127.90	129.7	1,487.8	1,514	17,519	9,306	983	8,395	543.0	385.8	43.07	41.54
MEAN	4.13	4.32	48.0	48.8	626	300	32.8	271	18.1	12.4	1.39	1.38
MAX	13	28	180	365	1,860	780	54	1,100	46	83	6.3	3.2
MIN	.12	1.3	2.0	13	12	61	16	18	4.5	2.9	.10	.23
CFSM	.02	.02	.21	.21	2.73	1.31	.14	1.18	.08	.05	.006	.006
IN.	.02	.02	.24	.25	2.85	1.51	.16	1.36	.09	.06	.006	.006

CAL YR 1970 TOTAL 57,909.68 MEAN 159 MAX 2,710 MIN .02 CFSM .69 IN 9.41
WTR YR 1971 TOTAL 40,475.81 MEAN 111 MAX 1,860 MIN .10 CFSM .48 IN 6.56

PEAK DISCHARGE (BASE, 1,880 CFS).--Feb. 24 (2100) 2,300 cfs (6.98 ft).

04197000 Sandusky River near Mexico, Ohio

LOCATION.--Lat 41°02'39", long 83°11'42", in sec. 13, T.1N., R.14E., Seneca County, on right bank at downstream side of county road bridge, 0.1 miles upstream from Honey Creek, 4.2 miles north of Mexico, 4.9 miles south of Tiffin, and 8.3 miles downstream from Mile Run.

DRAINAGE AREA.--774 sq. mi.

PERIOD OF RECORD.--March 1923 to December 1935, July 1938 to current year. Discharge records for November 1898 to November 1900, published in 22nd Annual Report, Part 4, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 733.1 ft above mean sea level, adjustment of 1912. Prior to Aug. 15, 1929, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years, 557 cfs (9.78 inches per year).

EXTREMES.--Current year: Maximum discharge, 7,980 cfs Feb. 23 (gage height, 14.68 ft); minimum 11 cfs Aug. 23, 24, 25, 26.
Period of record: Maximum discharge, 18,900 cfs Jan. 23, 1959 (gage height, 22.43 ft, from floodmark); minimum, 1.8 cfs Oct. 31, 1942 (during repairs to small dam above station).
Flood in June 1937 reached a stage of 22.5 ft, from information by local residents (discharge, 19,000 cfs).

REMARKS.--Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 714: 1929-30. WSP 874: 1927(M). WSP 1387: 1925, 1926-29, 1930(M), 1931. WSP 1912: Drainage area. See also Period of Record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	49	402	180	78	1,830	265	94	264	49	52	13
2	65	52	503	160	74	1,110	262	100	246	58	42	13
3	53	53	298	150	70	820	272	103	241	62	37	13
4	45	63	227	180	120	640	268	103	221	52	35	14
5	42	149	234	300	2,130	498	253	103	190	44	32	14
6	37	136	366	520	3,410	430	224	1,270	284	38	29	14
7	36	105	251	700	2,850	990	203	3,690	678	37	26	14
8	34	85	183	540	2,200	1,540	191	3,910	978	34	24	13
9	37	71	168	400	1,310	1,080	180	3,030	527	33	21	15
10	34	65	128	300	940	746	169	2,060	315	39	20	23
11	33	62	125	240	800	694	155	1,210	223	37	24	32
12	36	59	251	200	720	699	142	812	320	74	25	25
13	47	53	1,680	170	880	1,490	141	1,320	276	322	22	22
14	75	50	1,930	160	420	2,530	178	1,350	214	247	20	17
15	190	56	1,090	170	860	2,680	219	831	180	179	22	15
16	208	57	614	220	820	2,620	220	557	135	115	20	15
17	236	60	457	190	900	2,190	211	571	113	85	18	14
18	159	132	433	170	2,850	1,400	192	542	98	64	18	13
19	108	119	451	160	3,900	998	171	475	90	59	18	13
20	83	101	426	150	5,170	1,240	153	344	80	54	16	17
21	69	90	363	140	5,770	1,440	142	282	72	48	13	21
22	68	80	323	130	6,610	1,200	136	243	66	42	13	27
23	69	70	489	120	6,270	1,030	130	211	62	36	12	36
24	75	66	915	120	5,530	803	121	186	64	42	11	32
25	88	64	823	120	4,570	611	116	2,280	61	54	11	24
26	81	66	469	120	3,030	510	108	3,110	56	61	12	24
27	72	72	346	120	3,050	454	101	2,170	56	88	14	25
28	63	71	300	110	2,800	412	97	1,070	54	117	17	22
29	59	78	260	100	-----	375	96	622	51	116	15	22
30	54	122	230	90	-----	338	93	437	48	94	14	20
31	50	-----	200	84	-----	298	-----	334	-----	68	13	-----
TOTAL	2,389	2,356	14,915	6,514	68,632	33,696	5,204	33,420	6,263	2,448	686	582
MEAN	77.1	78.5	481	210	2,451	1,087	174	1,078	209	79.0	21.5	19.4
MAX	236	149	1,930	700	6,610	2,680	272	3,910	976	322	52	36
MIN	33	49	125	84	70	298	93	94	48	33	11	13
CFSM	.10	.10	.62	.27	3.17	1.40	.22	1.39	.27	.10	.03	.03
IN.	.11	.11	.72	.31	3.30	1.62	.25	1.61	.30	.12	.03	.03

CAL YR 1970 TOTAL 259,107 MEAN 710 MAX 5,190 MIN 23 CFSM .92 IN 12.45
WTR YR 1971 TOTAL 177,090 MEAN 485 MAX 6,610 MIN 11 CFSM .63 IN 8.51

PEAK DISCHARGE (BASE, 4,200 CFS).--Feb. 23 (0330) 7,980 cfs (14.68 ft).

STREAMS TRIBUTARY TO LAKE ERIE

04198000 Sandusky River near Fremont, Ohio

LOCATION.—Lat 41°18'28", long 83°09'32", sec. 17, T.4N., R.15E., Sandusky County, on left bank at downstream side of county road bridge, 2.3 miles upstream from Ballville diversion dam, 2.5 miles downstream from Wolf Creek, and 3.5 miles southwest of Fremont.

DRAINAGE AREA.—1,251 sq mi.

PERIOD OF RECORD.—November 1898 to March 1901 (gauge heights and discharge measurements only, published as "at Fremont"), October 1923 to December 1935, July 1938 to current year. Monthly discharge only for October 1923, published in WSP 1307.

GAGE.—Water-stage recorder. Datum of gage is 626.3 ft above mean sea level, adjustment of 1912. Nov. 18, 1898, to Mar. 10, 1901, nonrecording gage at site 4 miles downstream at different datum. Nov. 8, 1923, to Sept. 5, 1930, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.—45 years, (1923-35, 1938-71), 920 cfs (9.99 inches per year).

EXTREMES.—Current year: Maximum discharge, 21,000 cfs Feb. 23 (gage height, 9.36 ft); maximum gage height 13.89 ft (ice jam); minimum 33 cfs Sept. 3, 4, 5, 10, 19, 20 (gage height 0.93 ft).
Period of record: Maximum discharge, about 28,000 cfs Feb. 10, 1950; maximum gage height, 15.20 ft Feb. 10, 1950, from flood-mark (ice jam); minimum discharge, 4.4 cfs Feb. 29, 1964 (result of freezeup); minimum gage height, 0.76 ft Oct. 20, 1963.

REMARKS.—Records good except those for the winter period, which are fair. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).—WSP 744: 1931-32. WSP 874: 1936. WSP 1144: 1924-30. WSP 1387: 1923, 1926-29, 1931-35. WSP 1912. Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	71	457	290	140	3,020	440	177	508	80	89	39
2	97	71	761	260	130	1,830	424	187	449	74	77	15
3	83	40	562	250	120	1,300	424	210	424	74	65	33
4	71	77	473	260	220	998	432	217	399	80	57	33
5	59	83	361	600	3,600	834	407	229	399	71	54	34
6	55	182	415	950	6,000	738	369	640	969	68	52	40
7	55	161	432	1,200	4,800	1,660	338	5,010	1,730	59	49	42
8	53	129	309	850	3,600	2,390	309	5,300	1,660	57	47	42
9	51	113	235	650	2,200	1,920	288	4,470	1,090	55	45	38
10	51	97	182	500	1,700	1,350	267	3,070	640	59	46	35
11	57	89	172	400	1,500	1,150	248	1,980	440	156	49	30
12	53	86	432	330	1,300	1,120	229	1,210	726	198	51	50
13	59	83	2,330	280	1,400	2,100	217	1,330	1,230	161	47	52
14	77	80	2,910	260	1,500	3,820	260	1,810	535	345	45	48
15	97	93	2,020	290	1,400	4,520	309	1,330	399	274	43	44
16	229	97	1,150	400	1,300	4,730	353	847	295	187	40	39
17	260	89	808	340	1,500	3,720	345	715	217	129	41	36
18	254	109	749	300	5,000	2,950	323	715	177	101	40	35
19	177	177	749	270	7,000	1,790	295	680	156	86	37	35
20	129	172	726	250	10,000	1,940	260	535	141	109	37	40
21	109	150	630	230	14,000	2,270	235	424	125	93	40	55
22	93	133	544	220	18,000	1,980	223	369	109	74	136	52
23	86	120	571	210	19,900	1,680	217	330	101	68	105	49
24	83	110	1,120	200	17,700	1,400	204	302	93	71	54	51
25	93	110	1,280	200	14,400	1,040	193	3,180	93	89	41	54
26	105	100	969	200	10,600	834	187	6,490	86	83	41	53
27	101	100	490	200	4,860	726	182	4,170	83	86	41	61
28	89	130	440	180	4,390	660	182	2,420	80	109	40	56
29	83	204	400	160	-----	610	177	1,350	97	141	39	50
30	83	399	360	150	-----	553	177	886	93	141	40	47
31	80	-----	320	140	-----	499	-----	650	-----	121	39	-----
TOTAL	3,101	3,695	23,357	11,020	158,260	55,732	8,514	51,233	13,544	3,499	1,627	1,322
MEAN	100	123	753	355	5,652	1,798	284	1,653	451	113	52.5	44.1
MAX	260	399	2,910	1,200	19,900	4,730	440	6,490	1,730	345	136	61
MIN	51	71	172	140	120	499	177	177	80	55	37	13
CFSM	.08	.10	.60	.28	4.52	1.44	.23	1.32	.36	.09	.04	.04
IN.	.09	.11	.69	.33	4.71	1.66	.25	1.52	.40	.10	.05	.04

CAL YR 1970 TOTAL 387,220 MEAN 1,061 MAX 12,200 MIN 27 CFSM .05 IN 11.51
WTR YR 1971 TOTAL 334,904 MEAN 918 MAX 19,900 MIN 33 CFSM .73 IN 9.96

PEAK DISCHARGE (BASE, 7,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-23	1030	9.36	21,000	3-26	0330	5.05	7,480
2-20	0400	9.16	20,300				

STREAMS TRIBUTARY TO LAKE ERIE

191

04199000 Huron River at Milan, Ohio

LOCATION.--Lat 41°18'06", long 82°36'25", in SW 1/4 sec. 4, T.5N., R.22W., Erie County, on right bank 500 ft downstream from bridge on U.S. Highway 250, 0.2 mile northwest of Milan and 2 miles downstream from confluence of East and West Branches.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 573.26 ft above mean sea level. Prior to July 29, 1953, nonrecording gage at site of former highway bridge 45 ft upstream at same datum.

AVERAGE DISCHARGE.--21 years, 279 cfs (10.21 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,300 cfs Feb. 23 (gage height, 16.91 ft); minimum, 5.6 cfs Sept. 10, 11.
Period of record: Maximum discharge, 49,600 cfs July 5, 1969 (gage height, 31.1 ft, from floodmark) from rating curve extended above 18,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 2.2 cfs Sept. 10, 15, 19, 20, 21, 1955.

REMARKS.--Records good. Water-quality records for the current year at the monitor station 4.2 miles downstream are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	39	284	70	34	488	130	50	86	21	17	8.6
2	21	39	167	65	32	338	135	50	96	19	15	9.5
3	18	57	119	63	36	240	139	55	89	16	13	7.7
4	17	99	112	157	100	170	127	53	89	15	12	10
5	16	72	130	535	2,100	150	112	52	79	14	12	13
6	41	55	107	308	1,390	270	104	164	74	14	11	7.7
7	40	50	126	200	420	1,280	98	328	70	14	9.6	8.2
8	25	44	194	150	326	569	94	191	65	14	9.1	8.2
9	19	34	165	176	250	325	85	153	60	15	11	6.3
10	18	35	151	179	170	270	76	127	52	14	12	6.3
11	15	33	145	158	150	260	67	95	46	110	23	6.0
12	18	31	722	108	200	320	63	110	43	60	13	6.0
13	52	28	1,760	80	355	894	74	151	41	38	12	12
14	93	30	640	96	435	925	109	130	42	25	11	14
15	90	92	342	100	350	1,060	122	94	40	16	14	12
16	112	223	227	90	250	1,200	109	81	37	17	12	12
17	67	127	240	80	300	652	98	78	33	15	11	11
18	48	77	296	70	2,300	446	90	48	30	13	11	9.1
19	38	61	250	65	3,720	425	83	60	28	18	12	7.7
20	39	45	223	60	4,130	732	76	58	27	46	11	24
21	57	52	169	55	1,710	548	74	51	32	25	9.6	23
22	89	58	151	50	1,390	518	68	48	25	17	16	16
23	75	51	277	46	4,660	407	67	44	23	14	12	13
24	53	46	339	44	1,280	298	61	49	19	33	12	11
25	41	36	190	42	718	262	56	2,060	19	60	11	10
26	35	36	126	40	1,410	235	55	1,200	19	63	9.1	13
27	30	39	100	38	1,410	205	51	416	18	52	9.1	19
28	25	52	50	36	816	195	52	215	17	46	8.2	15
29	27	124	85	36	-----	197	54	141	43	41	6.8	12
30	34	449	80	34	-----	165	52	102	26	28	8.6	11
31	35	-----	75	34	-----	141	-----	98	-----	21	9.1	-----
TOTAL	1,313	2,224	8,077	3,264	30,522	14,110	2,581	6,572	1,368	922	363.2	341.6
MEAN	42.4	74.1	261	105	1,090	457	86.0	212	45.6	29.7	11.7	11.4
MAX	112	449	1,760	935	4,660	1,290	139	2,060	96	118	23	24
MIN	15	28	75	34	32	141	51	44	17	13	6.8	6.0
CFSM	.11	.20	.70	.20	2.94	1.23	.23	.57	.12	.08	.03	.03
IN.	.13	.22	.81	.33	3.06	1.42	.26	.66	.14	.09	.04	.03

CAL YR 1970 TOTAL 105,979 MEAN 290 MAX 1,120 MIN 10 CFSM .78 IN 10.63
WTR YR 1971 TOTAL 71,722.1 MEAN 197 MAX 4,660 MIN 6.0 CFSM .53 IN 7.19

PEAK DISCHARGE (BASE, 4,700 CFS).--Feb. 23 (G130) 6,300 cfs (16.91 ft).

STREAMS TRIBUTARY TO LAKE ERIE

04199500 Vermilion River near Vermilion, Ohio

LOCATION.--Lat 41°22'55", long 82°19'01", in T.6N., R.19W., Lorain County, on right bank 40 ft downstream from bridge on North Ridge Road, 3.5 miles southeast of Vermilion and 4.5 miles upstream from mouth.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 595.14 ft above mean sea level. Prior to Aug. 3, 1953, nonrecording gage at site 40 ft upstream at same datum.

AVERAGE DISCHARGE.--21 years, 228 cfs (11.82 inches per year).

EXTREMES.--Current record: Maximum discharge, about 5,300 cfs Feb. 23; maximum gage height, 12.20 ft Feb. 20 (backwater from ice); minimum discharge, 0.74 cfs Sept. 4.

Period of record: Maximum discharge, 40,800 cfs July 6, 1969 (gage height, 17.14 ft), from rating curve extended above 9,800 cfs on basis of contracted-opening measurement of peak flow; no flow at times in many years.

REMARKS.--Records good except those for January and February which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1912: Drainage area. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	35	670	65	55	480	103	30	68	7.1	11	.98
2	27	44	280	65	55	345	100	29	62	5.0	8.2	.98
3	21	275	175	60	60	270	103	31	52	3.9	6.4	.98
4	16	536	182	75	80	207	108	31	67	3.4	5.0	1.6
5	13	246	362	818	1,000	169	95	29	82	3.2	4.3	4.3
6	26	145	234	764	1,200	210	82	98	74	3.2	3.6	2.6
7	34	95	136	362	650	764	74	238	60	2.9	3.9	1.4
8	22	68	86	250	240	638	68	246	72	2.6	4.3	1.1
9	15	50	63	280	150	295	63	246	48	2.4	3.9	1.1
10	11	41	52	300	120	270	56	210	38	2.4	2.9	.98
11	8.4	33	55	240	110	250	52	133	28	9.0	3.4	.90
12	8.0	28	670	180	130	275	48	130	24	9.5	2.4	.90
13	39	25	2,290	140	170	566	49	121	110	6.1	2.3	2.3
14	148	25	1,240	160	200	930	84	127	41	5.0	2.1	6.4
15	380	222	501	170	188	980	95	100	28	4.8	2.1	3.6
16	330	529	290	150	168	1,050	105	76	22	6.1	1.9	2.4
17	196	368	255	130	230	654	90	65	17	8.5	1.6	2.1
18	103	182	300	120	1,000	438	82	56	14	6.8	1.3	1.7
19	60	115	305	110	2,200	392	78	55	13	5.4	1.2	1.6
20	43	88	242	100	3,200	550	82	53	10	12	1.1	2.9
21	50	80	193	90	1,900	536	67	44	13	13	.98	6.8
22	90	82	160	85	1,300	515	56	37	13	7.5	3.4	4.3
23	157	100	260	80	3,400	459	49	33	8.5	5.0	2.3	3.4
24	115	78	445	75	1,900	315	45	37	7.1	7.8	1.4	2.9
25	70	63	260	70	920	246	40	1,230	6.1	15	1.2	3.4
26	50	56	163	65	1,060	203	38	1,610	6.4	48	1.2	2.9
27	38	36	120	65	1,200	175	35	543	6.4	53	1.1	19
28	29	43	100	60	872	160	35	280	6.4	37	1.1	14
29	24	98	85	60	-----	148	35	179	10	38	.98	6.4
30	26	508	75	60	-----	136	33	124	12	20	.90	4.1
31	31	-----	73	55	-----	115	-----	88	-----	15	1.1	-----
TOTAL	2,216.4	4,294	10,319	5,384	23,742	12,741	2,050	6,309	1,018.9	368.6	89.06	108.02
MEAN	71.5	143	333	171	848	411	68.3	204	34.0	11.9	2.87	3.60
MAX	380	536	2,290	818	3,400	1,050	108	1,610	110	53	11	19
MIN	8.0	25	52	55	55	115	33	29	6.1	2.4	.90	.90
CFSM	.27	.55	1.27	.65	3.24	1.57	.26	.78	.13	.05	.01	.1
IN.	.31	.61	1.47	.75	3.37	1.81	.29	.90	.14	.05	.01	.02

CAL YR 1970 TOTAL 90,930.78 MEAN 249 MAX 7,200 MIN .04 CFSM .95 IN 12.91
WTR YR 1971 TOTAL 62,559.98 MEAN 188 MAX 3,400 MIN .98 CFSM .72 IN 9.73

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-20	-	-	about 3,900	2-23	-	-	about 5,300

STREAMS TRIBUTARY TO LAKE ERIE

193

04200500 Black River at Elyria, Ohio

LOCATION.--Lat 41°22'49", long 82°06'17", in T.6N., R.17W., Lorain County, on left bank in Cascade Park at Elyria, 0.8 mile downstream from confluence of East and West Branches.

DRAINAGE AREA.--396 sq mi.

PERIOD OF RECORD.--October 1944 to current year. Records for May 1903 to July 1906 (published as "near Elyria") published in WSP 97, 129, and 205, are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 620.83 ft above mean sea level.

AVERAGE DISCHARGE.--27 years, 303 cfs (10.39 inches per year).

EXTREMES.--Current year: Maximum discharge, 6,530 cfs Feb. 23 (gage height, 12.03 ft); maximum gage height, 12.23 ft Feb. 20 (back-water from ice); minimum discharge, 4.2 cfs Sept. 6.

Period of record: Maximum discharge, 51,700 cfs July 6, 1969 (gage height, 26.4 ft, from floodmark), from rating curve extended above 13,000 cfs on basis of slope-area measurement of peak flow; no flow for part of Oct. 10, 1956 (result of temporary storage at dam upstream).

REMARKS.--Records good. Some regulation at low flow for industrial use. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	127	992	88	34	708	155	34	77	38	16	8.4
2	57	264	520	82	36	487	153	30	74	26	16	8.4
3	38	2,190	332	74	40	372	155	36	63	20	15	8.4
4	31	1,900	377	353	50	281	153	36	54	14	13	7.6
5	25	743	970	1,140	1,400	237	132	37	88	12	12	5.7
6	33	403	529	747	1,800	308	114	195	108	14	10	9.5
7	39	279	302	415	922	1,060	98	457	137	12	8.4	9.2
8	31	205	213	477	345	1,010	92	397	177	12	8.4	8.4
9	23	155	177	523	209	440	81	424	90	26	8.4	9.2
10	17	123	155	280	170	403	72	354	58	13	9.6	8.4
11	14	103	159	109	150	397	63	201	42	171	16	6.0
12	20	92	1,100	87	140	472	59	145	31	72	9.6	5.4
13	147	81	3,920	72	187	874	68	123	83	30	9.6	45
14	754	93	2,490	93	235	1,240	111	140	159	20	7.6	28
15	1,850	642	780	96	241	1,110	134	122	103	18	5.7	19
16	1,220	1,500	445	85	235	1,250	134	104	71	20	6.8	16
17	535	859	505	80	283	894	116	77	50	16	8.4	17
18	263	418	702	70	640	565	99	64	37	12	8.4	17
19	163	275	562	65	2,500	487	95	64	27	40	8.4	15
20	127	227	409	59	4,800	708	84	59	27	49	9.2	47
21	136	215	318	63	3,840	778	72	49	106	27	7.2	33
22	193	229	281	45	2,190	834	63	41	44	16	9.2	23
23	189	221	463	42	5,530	754	57	37	26	12	9.6	20
24	157	167	618	40	4,400	493	51	67	20	35	9.2	16
25	125	122	372	42	1,230	397	45	1,000	18	128	7.6	13
26	96	109	213	40	1,200	360	44	1,640	40	139	7.6	16
27	77	99	171	38	1,580	412	40	641	23	87	10	79
28	63	103	151	36	1,250	490	40	316	18	57	7.6	56
29	59	255	127	34	-----	315	40	205	44	36	5.4	29
30	64	1,150	106	34	-----	229	36	134	57	30	7.6	18
31	93	-----	98	32	-----	185	-----	96	-----	22	8.4	-----
TOTAL	6,729	13,349	18,557	5,441	35,637	18,550	2,656	7,320	1,952	1,224	293.9	598.6
MEAN	217	445	599	176	1,273	598	88.5	236	65.1	39.5	9.48	20.0
MAX	1,850	2,190	3,920	1,140	5,530	1,250	155	1,640	177	171	16	79
MIN	14	91	98	32	34	185	36	30	18	12	5.4	5.4
CFSM	.55	1.12	1.51	.44	3.21	1.51	.22	.60	.16	.10	.02	.05
IN.	.63	1.25	1.74	.51	3.35	1.74	.25	.69	.18	.11	.03	.06

CAL YR 1970 TOTAL 128,317.0 MEAN 352 MAX 5,510 MIN 5.0 CFSM .89 IN 12.05
WTR YR 1971 TOTAL 112,307.5 MEAN 308 MAX 5,530 MIN 5.4 CFSM .78 IN 10.55

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
12-13	1230	9.39	4,060	2-23	0430	12.03	6,530
2-20	1430	10.52	5,080				

STREAMS TRIBUTARY TO LAKE ERIE

04201500 Rocky River near Berea, Ohio

LOCATION.--Lat 41°24'24", long 81°53'14", in T.6N., R.15W., Cuyahoga County, on right bank at downstream side of Cedar Point Road Bridge in Rocky River Reservation just downstream from confluence of East and West Branches, and 3 miles northwest of Berea.

DRAINAGE AREA.--267 sq. mi.

PERIOD OF RECORD.--October 1923 to September 1935, September 1943 to current year. Monthly discharge only for October 1923, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is 649.90 ft above mean sea level (Cuyahoga County bench mark). Prior to Sept. 30, 1935, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 249 cfs (12.67 inches per year).

EXTREMES.--Current year: Maximum discharge, 5,100 cfs Feb. 20 (gage height, 5.40 ft); minimum, 7.4 cfs Sept. 1.

Period of record: Maximum discharge, 21,400 cfs Jan. 22, 1959 (gage height, 14.10 ft), from rating curve extended above 11,000 cfs on basis of contracted-opening measurement of peak flow; maximum gage height, 18.6 ft June 29, 1924 (backwater caused by tornado); minimum discharge, 0.2 cfs Sept. 2, 1932, Aug. 18, 19, 27, 28, 30, 31, 1933.

Flood of March 1913 reached a stage of 20.9 ft.

REMARKS.--Records good. Some regulation at low flow by small reservoirs on East Branch. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1437: 1924, 1925(M), 1926, 1927(M), 1928-29, 1930-35(M), 1945. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	129	463	95	80	405	187	63	49	85	16	8.6
2	47	565	278	90	80	289	218	63	52	44	15	8.6
3	44	3,570	200	95	90	221	218	54	63	27	13	8.6
4	37	946	886	1,090	150	155	162	67	58	20	12	10
5	29	413	545	1,490	1,900	173	130	58	45	16	12	18
6	54	255	283	364	1,400	347	124	708	218	14	12	11
7	36	178	184	229	406	1,400	119	536	121	13	14	23
8	27	133	159	243	220	588	108	462	257	12	10	12
9	22	109	146	269	115	331	100	400	130	13	10	11
10	18	98	142	181	110	296	100	210	69	15	14	10
11	18	87	151	130	150	290	85	146	47	92	20	9.8
12	23	81	1,840	91	130	337	71	187	37	44	14	9.8
13	1,200	77	2,830	98	190	966	100	335	65	31	11	222
14	927	94	821	146	250	988	253	187	83	21	10	350
15	1,290	1,210	448	212	200	829	218	124	45	18	10	116
16	474	1,240	328	141	140	838	146	100	34	23	10	42
17	195	466	620	119	180	510	124	143	28	24	12	25
18	116	272	652	110	684	381	121	127	24	22	10	20
19	81	199	391	110	2,800	369	105	90	21	33	9.8	14
20	69	174	286	100	4,560	625	95	90	23	31	4.8	49
21	72	191	212	100	1,790	452	85	71	462	27	13	92
22	100	159	242	95	1,700	681	78	60	222	20	19	65
23	115	129	464	95	3,720	415	75	52	85	15	12	31
24	88	104	337	90	1,030	320	69	80	49	140	15	20
25	64	83	189	90	575	335	63	1,680	33	239	13	14
26	51	76	141	85	919	336	50	804	40	108	12	20
27	46	77	130	85	1,200	517	50	284	31	75	10	121
28	44	140	120	85	739	571	67	176	27	47	9.8	116
29	45	375	110	85	-----	395	69	119	50	29	9.2	60
30	68	1,070	100	85	-----	275	67	80	38	22	8.6	49
31	135	-----	100	80	-----	214	-----	58	-----	18	9.2	-----
TOTAL	5,599	12,700	13,798	6,378	25,508	14,849	3,457	7,714	2,506	1,338	375.4	1,590.4
MEAN	181	423	445	206	911	479	115	249	83.5	43.2	12.1	51.0
MAX	1,290	3,570	2,830	1,490	4,560	1,400	253	1,680	462	239	20	350
MIN	18	76	100	80	80	155	50	52	21	12	8.6	4.6
CFSM	.68	1.58	1.67	.77	3.41	1.79	.43	.93	.31	.16	.05	.10
IN.	.78	1.77	1.92	.89	3.55	2.07	.48	1.07	.35	.19	.05	.22
CAL YR 1970	TOTAL 97,117.2 MEAN 266 MAX 4,400 MIN 8.8 CFSM 1.00 IN 13.53											
WTR YR 1971	TOTAL 95,812.8 MEAN 263 MAX 4,560 MIN 8.6 CFSM .99 IN 13.35											

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
11-3	0400	4.98	4,340	2-20	0900	5.40	5,100
12-12	2300	4.97	4,330	2-23	0400	5.21	4,760

04202000 Cuyahoga River at Hiram Rapids, Ohio

LOCATION.--Lat 41°20'26", long 81°10'01", in T.5N., R.7W., Portage County, on left bank at downstream side of bridge on Winchell Road at Hiram Rapids, 0.6 mile downstream from Black Brook.

DRAINAGE AREA.--151 sq mi.

PERIOD OF RECORD.--August 1927 to December 1935 (published as "near Hiram"), October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,087.46 ft above mean sea level, unadjusted. Prior to Aug. 26, 1927, nonrecording gage and Aug. 26, 1927, to Dec. 31, 1935, water-stage recorder, at site 2.8 miles downstream at different datum. Oct. 20, 1944, to Oct. 22, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years, 195 cfs (17.54 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,040 cfs Feb. 23 (gage height, 5.94 ft); minimum, 18 cfs Sept. 3.

Period of record: Maximum discharge, 3,670 cfs Jan. 23, 1959 (gage height, 8.11 ft), from rating curve extended above 2,600 cfs; minimum, 5.1 cfs Sept. 2, 1933.

REMARKS.--Records good. Flow regulated by East Branch Reservoir (usable capacity, 4,140 acre-ft) 14.6 miles upstream since 1939 and by LaDue Reservoir (usable capacity, 18,110 acre-ft) 9.8 miles upstream since 1961. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1054: 1945. WSP 1437: 1931. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	117	564	147	95	1,300	394	143	56	86	67	25
2	159	136	587	133	92	1,090	366	140	47	81	65	21
3	147	183	529	147	78	896	340	120	51	70	64	19
4	136	184	493	158	75	700	318	103	46	59	63	34
5	125	200	423	275	112	576	284	93	40	51	62	57
6	124	207	393	394	220	456	250	129	40	48	62	63
7	127	203	369	528	265	463	214	150	46	45	60	62
8	130	194	328	489	305	455	185	164	63	50	59	60
9	128	181	297	455	384	456	163	168	60	58	58	58
10	123	168	271	311	554	498	161	162	49	59	56	48
11	118	158	244	247	406	457	150	146	40	70	58	52
12	111	151	257	197	350	402	138	141	35	76	58	60
13	146	148	326	178	300	373	133	142	33	76	64	77
14	171	147	443	142	270	415	145	137	31	80	70	105
15	219	225	582	145	250	590	161	120	28	75	73	115
16	271	321	564	147	270	820	171	107	27	70	75	112
17	308	495	512	148	290	946	172	102	24	67	75	96
18	311	615	461	150	325	871	178	90	23	66	75	79
19	281	565	421	135	395	747	186	82	31	67	78	67
20	238	468	402	112	721	660	188	78	45	74	82	63
21	200	394	373	96	1,250	585	179	60	57	74	85	71
22	174	324	341	93	1,780	528	161	47	69	68	91	75
23	147	270	314	92	2,010	478	141	40	77	64	108	70
24	129	235	285	89	1,870	433	123	38	86	72	104	58
25	116	213	263	87	1,580	390	112	88	86	88	110	41
26	99	196	223	91	1,200	355	97	127	80	91	117	31
27	82	198	196	110	1,160	325	87	146	66	87	150	30
28	65	227	183	106	1,290	320	89	136	56	81	132	38
29	63	282	176	118	-----	343	114	116	62	77	99	40
30	78	447	169	95	-----	384	133	94	80	72	58	36
31	100	-----	160	100	-----	414	-----	72	-----	70	36	-----
TOTAL	4,796	7,852	11,149	5,715	17,897	17,726	5,533	3,481	1,534	2,172	2,414	1,763
MEAN	155	262	360	184	639	572	184	112	51.1	70.1	77.9	58.8
MAX	311	615	587	528	2,010	1,300	394	168	86	91	150	115
MIN	63	117	160	87	75	320	87	38	23	45	36	19
MEAN+	191	295	372	142	695	561	180	112	43.0	31.3	8.87	66.2
CFSM+	1.26	1.95	2.46	.94	4.60	3.72	1.19	.74	.28	.21	.06	.44
IN.+	1.4	2.18	2.84	1.08	4.79	4.28	1.33	.86	.32	.24	.07	.49

CAL YR 1970 TOTAL 71,746 MEAN 197 MAX 1,080 MIN 25 MEAN+ 197 CFSM+ 1.30 IN.+ 17.72
WTR YR 1971 TOTAL 82,032 MEAN 225 MAX 2,010 MIN 19 MEAN+ 222 CFSM+ 1.47 IN.+ 19.94

+ Adjusted for change in contents of East Branch and LaDue Reservoirs.

STREAMS TRIBUTARY TO LAKE ERIE

04204000 Little Cuyahoga River at Mogadore, Ohio

LOCATION.--Lat 41°03'47", long 81°23'38", in T.1N., R.10W., Summit County, on left bank at upstream side of bridge on State Highway 532, 500 ft downstream from Mogadore Reservoir, 0.8 mile upstream from Wingfoot Lake Outlet, and 0.8 mile north of Mogadore.

DRAINAGE AREA.--17.3 sq mi, includes unnamed tributary 0.2 mile downstream.

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,058.74 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--25 years, 12.6 cfs.

EXTREMES.--Current year: Maximum discharge, 117 cfs Feb. 23 (gage height, 3.90 ft); minimum, 1.0 cfs Aug. 6, 7, 24, 25.

Period of record: Maximum discharge, 167 cfs Mar. 10, 1964 (gage height, 3.75 ft); maximum gage height, 4.30 ft Jan. 21, 1959 (backwater from aquatic growth); minimum discharge, 0.10 cfs Oct. 29, 30, 31, 1967.

REMARKS.--Records fair except periods of no gage height record which are poor. Flow regulated by Mogadore Reservoir (usable capacity, 6,540 acre-ft). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1912: Drainage area. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	22	16	8.5	36	17	6.5	9.5	4.0	1.6	2.0
2	10	13	21	15	7.7	35	17	6.9	10	3.6	1.6	2.6
3	10	24	22	15	7.7	28	16	6.9	13	3.4	1.6	2.8
4	9.0	16	29	28	8.1	27	14	6.5	11	3.2	1.6	3.0
5	8.6	14	25	22	50	25	14	6.5	10	3.0	1.5	3.2
6	7.5	13	22	18	22	27	13	15	10	2.8	1.0	2.8
7	7.1	12	21	16	19	42	12	9.0	9.9	2.8	1.2	2.4
8	6.1	11	21	15	15	34	11	14	11	2.6	1.3	2.8
9	5.4	11	20	14	16	30	11	12	8.5	2.6	1.8	2.8
10	5.4	11	19	14	16	28	9.4	12	7.7	2.6	2.0	2.6
11	6.1	11	26	13	15	25	9.4	11	6.5	5.5	2.2	2.0
12	6.1	12	52	13	17	26	10	17	6.9	3.4	2.0	2.2
13	49	13	47	13	18	32	14	13	7.3	2.6	1.8	2.5
14	17	15	37	18	16	27	14	9.0	6.5	2.2	2.0	1.5
15	15	40	33	15	15	27	9.9	9.4	6.5	2.0	2.4	2.8
16	13	25	33	14	14	28	9.0	49	6.0	2.0	2.4	5.4
17	11	21	34	13	20	25	9.4	15	6.0	1.9	2.2	11
18	10	20	31	12	25	23	9.4	13	5.5	1.9	1.8	12
19	9.0	18	29	12	46	25	8.5	12	5.5	5.5	1.5	14
20	8.1	20	26	11	68	25	8.5	11	5.0	3.8	1.3	24
21	9.9	20	24	11	49	26	8.5	11	12	2.6	1.3	22
22	11	18	26	10	75	27	7.7	11	8.0	1.9	1.5	17
23	10	16	25	10	91	24	7.3	9.9	5.5	1.6	1.3	15
24	9.0	14	22	9.9	64	22	7.3	10	4.8	4.4	1.2	14
25	8.5	13	20	9.9	54	22	7.3	15	4.4	2.2	1.2	14
26	8.5	13	20	13	50	20	6.9	10	4.2	1.8	1.3	15
27	7.7	13	18	11	56	19	6.5	9.5	4.0	1.6	3.5	16
28	7.7	17	18	10	44	19	6.5	11	4.4	1.4	1.8	15
29	8.1	27	18	9.9	-----	18	6.5	10	6.0	1.3	1.5	14
30	19	29	17	9.9	-----	18	6.5	9.5	4.8	1.5	1.6	17
31	15	-----	16	9.0	-----	17	-----	9.5	-----	1.6	1.6	-----
TOTAL	337.8	512	794	420.6	907.0	807	307.5	371.1	220.4	83.3	52.6	299.4
MEAN	10.9	17.1	25.6	13.6	32.4	26.0	10.3	12.0	7.35	2.69	1.70	9.98
MAX	49	40	52	28	91	42	17	49	13	5.5	3.5	25
MIN	5.4	11	16	9.0	7.7	17	6.5	6.5	4.0	1.3	1.0	2.0

CAL YR 1970 TOTAL 5,354.8 MEAN 14.7 MAX 58 MIN 5.1
WTR YR 1971 TOTAL 5,112.7 MEAN 14.0 MAX 91 MIN 1.0

NOTE.--No gage height record May 24 to June 6, June 15 to July 28.

STREAMS TRIBUTARY TO LAKE ERIE

197

04204500 Little Cuyahoga River at Massillon Road, Akron, Ohio

LOCATION.--Lat 41°03'37", long 81°27'48", in T.1N., R.10W., Summit County, on left bank 50 ft downstream from bridge on Massillon Road in Akron and 250 ft upstream from Springfield Lake Outlet.

DRAINAGE AREA.--31.6 sq mi.

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,005.20 ft above mean sea level (city of Akron bench mark).

AVERAGE DISCHARGE.--25 years, 26.4 cfs.

EXTREMES.--Current year: Maximum discharge, 260 cfs Feb. 22 (gage height, 1.96 ft); minimum, 3.8 cfs Sept. 12 (gage height, 0.31 ft).
Period of record: Maximum discharge, 891 cfs Jan. 21, 1959 (gage height, 3.99 ft); minimum, 1.6 cfs Oct. 3, 19, 1963; minimum gage height, 0.16 ft Sept. 24, 1964, July 16, 1965.

REMARKS.--Records good. Flow regulated by Mogadore Reservoir 4.5 miles upstream (usable capacity, 6,540 acre-ft) and Wingfoot Lake 7.2 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	21	39	23	17	69	36	14	17	9.0	6.6	6.2
2	14	32	33	23	17	65	39	15	18	8.4	7.4	6.0
3	13	50	38	22	17	58	34	15	23	7.5	7.3	5.8
4	11	28	55	56	20	53	31	14	19	6.9	7.4	5.8
5	11	23	40	45	147	52	31	14	17	6.3	7.8	5.4
6	10	21	33	28	55	60	30	56	20	6.3	6.7	5.3
7	10	19	31	23	33	95	29	25	21	6.3	5.5	5.5
8	9.5	18	30	22	29	66	28	39	19	6.3	5.5	5.7
9	8.9	18	30	23	32	59	27	24	16	6.6	5.8	5.5
10	12	18	28	23	31	56	22	22	15	6.0	6.3	5.4
11	11	18	51	23	30	52	21	21	14	14	6.9	5.0
12	22	18	113	22	36	53	20	44	14	8.1	5.8	4.8
13	144	19	93	26	37	68	24	28	14	6.3	5.5	97
14	40	34	59	42	30	56	27	24	14	6.0	5.2	49
15	28	91	50	27	29	52	21	21	14	5.8	5.5	13
16	23	49	50	24	28	53	21	68	13	6.9	5.5	10
17	20	33	55	23	41	50	20	30	13	5.8	5.2	12
18	18	30	48	22	59	45	20	22	13	5.5	5.2	12
19	17	27	42	20	117	49	19	20	12	16	5.0	12
20	16	34	38	21	144	56	18	19	12	10	5.8	42
21	21	31	35	21	89	58	18	18	28	6.6	8.2	35
22	20	27	43	22	147	62	17	18	15	6.0	6.4	20
23	18	23	42	21	173	52	17	17	13	5.8	5.5	17
24	16	21	34	20	108	50	16	16	13	16	5.3	15
25	15	19	30	22	93	48	15	26	13	7.8	5.2	14
26	15	19	29	27	93	45	16	18	12	6.9	5.5	15
27	14	21	29	19	108	42	15	17	12	5.8	31	15
28	14	32	28	22	85	41	15	19	13	5.5	8.3	16
29	18	65	27	20	-----	40	15	18	18	5.6	6.3	14
30	40	66	25	19	-----	38	15	17	11	5.7	6.2	14
31	28	-----	24	18	-----	36	-----	17	-----	6.4	6.1	-----
TOTAL	671.4	925	1,302	769	1,845	1,679	677	736	466	232.1	215.9	488.4
MEAN	21.7	30.8	42.0	24.8	65.9	54.2	22.6	23.7	15.5	7.49	6.96	16.3
MAX	144	91	113	56	173	95	39	68	28	16	31	97
MIN	8.9	18	24	18	17	36	15	14	11	5.5	5.0	4.8
CAL YR 1970	TOTAL	9,151.3	MEAN	25.1	MAX	144	MIN	8.9				
WTR YR 1971	TOTAL	10,006.8	MEAN	27.4	MAX	173	MIN	4.8				

STREAMS TRIBUTARY TO LAKE ERIE

04205000 Springfield Lake Outlet at Akron, Ohio

LOCATION.--Lat 41°03'21", long 81°27'52", in T.1N., R.10W., Summit County, on right bank 3 miles downstream from Springfield Lake in Akron, and 0.3 mile upstream from mouth.

DRAINAGE AREA.--9.72 sq mi.

PERIOD OF RECORD.--May 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,015.34 ft above mean sea level (city of Akron bench mark).

AVERAGE DISCHARGE.--25 years, 5.44 cfs.

EXTREMES.--Current year: Maximum discharge, 171 cfs Feb. 22 (gage height, 2.53 ft); maximum gage height, 3.57 ft probably occurred Feb. 5 (backwater from ice); no flow part of each day Sept. 5, 11.

Period of record: Maximum discharge, 519 cfs Jan. 21, 1959 (gage height, 3.42 ft), from rating curve extended above 95 cf maximum gage height, 3.57 ft, probably occurred Feb. 5, 1971 (backwater from ice); no flow at times in 1953-54, 1961-67, 1970.

REMARKS.--Records good except those for January and February, which are poor. Flow regulated by Springfield Lake. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	2.8	10	2.0	3.0	18	6.8	1.8	1.2	.54	.24	.24
2	1.1	5.7	6.8	2.0	2.5	16	7.9	1.9	1.1	.54	.29	.19
3	.70	10	8.2	1.9	2.0	15	7.1	1.9	2.3	.41	.29	.19
4	.54	4.6	14	5.0	2.0	14	6.5	1.6	1.8	.41	.41	.29
5	.47	3.6	7.9	4.0	44	14	6.2	2.2	1.9	.35	.70	.19
6	.41	2.4	6.2	2.5	16	17	6.2	15	1.6	.35	.24	.15
7	.35	1.8	5.0	1.9	9.0	26	6.2	5.5	2.0	.35	.24	.24
8	.29	1.6	4.8	1.6	6.0	16	6.2	11	1.5	.35	.29	.19
9	.35	1.3	4.8	1.4	4.6	12	5.3	4.3	1.1	1.0	.35	.15
10	2.1	1.6	4.6	1.2	4.0	12	2.8	3.3	.99	.47	.41	.12
11	1.2	1.5	9.5	1.2	3.4	11	2.6	2.6	.88	3.8	.41	.15
12	3.9	1.5	26	1.1	2.8	12	2.4	11	.99	.88	.24	.19
13	42	1.9	18	1.6	2.6	18	3.8	4.8	.99	.54	.35	32
14	7.9	6.0	12	3.5	2.4	14	3.8	3.4	.88	.47	.35	7.8
15	4.3	24	8.3	2.5	2.2	13	3.4	2.6	.79	.62	.66	2.2
16	2.6	9.5	9.1	1.6	2.0	12	2.8	4.7	.79	1.1	.24	1.5
17	1.8	5.3	10	1.2	4.0	10	3.0	3.8	.62	.47	.19	1.1
18	1.4	4.0	8.3	1.0	10	9.1	2.8	2.6	.62	.35	.19	.79
19	.88	3.8	7.5	1.0	34	10	2.4	2.0	.62	3.4	.19	.62
20	.79	5.3	6.5	.90	42	12	2.2	1.9	.54	1.3	.41	13
21	2.5	4.3	5.9	.82	28	12	2.2	1.6	7.1	.47	1.9	5.2
22	1.8	3.2	7.9	.72	55	12	2.2	1.5	1.5	.35	1.2	2.2
23	1.2	2.6	7.1	.60	54	10	2.2	1.3	.99	.35	.41	1.5
24	1.1	2.0	6.2	.60	26	9.1	1.9	1.2	.70	5.0	.29	.99
25	.88	2.0	5.0	.70	22	8.3	1.9	4.6	.62	.88	.24	.79
26	.79	2.0	5.6	1.0	23	7.9	1.9	1.8	.62	.70	.73	1.3
27	.70	2.2	7.0	.70	27	7.9	1.8	1.6	.62	.35	5.5	.79
28	.88	5.7	5.5	.50	23	7.5	1.8	1.6	.54	.24	.62	.70
29	2.1	16	3.0	5.5	-----	7.5	1.8	1.2	2.7	.35	.35	.88
30	5.6	17	2.5	4.0	-----	7.1	1.8	1.2	.88	.35	.24	.70
31	3.9	-----	2.0	3.5	-----	6.8	-----	1.1	-----	.29	.24	-----
TOTAL	95.05	155.2	246.1	57.70	456.5	377.2	109.9	106.2	39.48	27.03	18.41	76.35
MEAN	3.07	5.17	7.94	1.86	16.3	12.2	3.66	3.43	1.32	.87	.59	2.55
MAX	42	24	76	5.5	55	26	7.9	15	7.1	5.0	5.5	32
MIN	.29	1.3	2.0	.50	2.0	6.8	1.8	1.1	.54	.24	.19	.12

CAL YR 1970 TOTAL 1,607.68 MEAN 4.40 MAX 45 MIN 0
 WTR YR 1971 TOTAL 1,765.12 MEAN 4.84 MAX 55 MIN .12

199

LOCATION.--Lat 41°08'08", long 81°32'50", Summit County, on right bank 320 ft upstream from North Portage Path bridge at Old Portage, 1.2 miles downstream from Little Cuyahoga River, and 4 miles northwest of Akron City Hall.

PERIOD OF RECORD.--September 1921 to December 1935, March 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 740.11 ft above mean sea level, unadjusted. Prior to Dec. 21, 1923, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 403 cfs.

EXTREMES.--Current year: Maximum discharge, 3,040 cfs Feb. 22 (gage height, 8.40 ft); minimum, 49 cfs Sept. 12.

Period of record: Maximum discharge, 6,500 cfs Jan. 21, 1959 (gage height 11.54 ft), from rating curve extended above 3,900 cfs on basis of contracted-opening estimate of peak flow at site with drainage area of 488 sq mi adjusted to gaging station by drainage-area relation; minimum, 14 cfs Aug. 27, 1944.

REMARKS.--Records good. Natural flow of stream affected by diversions, storage reservoirs and power plants. At Lake Rockwell, 17.7 miles above gage, an average of 76 cfs was diverted for municipal supply of city of Akron. Sewage from city enters river 2.9 miles downstream from station. Some diversion from the Tuscarawas drainage into this basin at Portage Lakes (see REMARKS for station 03116000). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1307: 1924(M). WSP 1912: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	287	702	326	163	1,910	617	139	139	186	72	86
2	228	401	727	326	150	1,840	635	141	123	144	79	99
3	218	470	793	293	144	1,640	596	146	198	115	77	61
4	191	404	1,000	482	161	1,320	554	139	152	93	75	56
5	182	323	930	689	954	1,070	545	159	159	84	75	55
6	168	332	748	566	856	975	521	497	170	80	77	53
7	168	350	659	434	593	1,090	488	416	161	86	72	55
8	161	341	614	512	485	1,030	458	485	238	86	72	56
9	159	338	563	554	482	863	449	398	248	89	73	54
10	175	305	527	539	488	853	422	350	172	86	73	53
11	170	293	597	488	512	891	359	290	129	175	80	53
12	235	275	1,010	413	575	832	344	398	107	133	71	52
13	1,130	287	1,180	350	518	877	371	383	101	93	66	545
14	786	338	992	485	461	881	395	320	97	88	64	354
15	542	741	846	422	449	930	353	281	95	86	71	257
16	479	877	902	332	425	1,020	338	317	91	129	64	225
17	413	692	933	311	488	1,120	323	329	89	86	63	231
18	425	680	880	260	623	1,230	314	250	80	82	62	162
19	404	741	786	255	1,030	1,220	308	198	73	287	60	152
20	368	765	706	215	1,730	1,160	290	170	80	152	67	353
21	362	692	650	215	1,950	1,030	156	152	473	103	84	319
22	335	605	662	225	2,230	972	161	129	210	103	96	216
23	317	524	641	198	2,890	891	166	117	141	97	68	186
24	258	431	590	195	2,760	814	159	125	117	253	57	171
25	240	371	521	208	2,350	741	156	245	99	161	57	161
26	220	338	476	243	2,260	702	156	200	95	119	57	169
27	186	332	428	182	2,200	653	156	213	97	107	187	174
28	189	395	395	177	2,060	623	154	233	101	93	223	153
29	223	554	377	186	-----	617	161	210	223	82	190	183
30	383	680	359	198	-----	608	172	184	268	75	158	169
31	320	-----	344	175	-----	608	-----	168	-----	73	112	-----
TOTAL	9,870	14,162	21,538	10,454	29,987	31,011	10,277	7,782	4,526	3,626	2,702	4,913
MEAN	318	472	695	337	1,071	1,000	343	251	151	117	87.2	164
MAX	1,130	877	1,180	689	2,890	1,910	635	497	473	287	223	545
MIN	159	275	344	175	144	608	154	117	73	73	57	55

CAL YR 1970	TOTAL 145,481	MEAN 399	MAX 1,750	MIN 84
WTR YR 1971	TOTAL 150,848	MEAN 413	MAX 2,890	MIN 52

STREAMS TRIBUTARY TO LAKE ERIE

04207200 Tinkers Creek at Bedford, Ohio

LOCATION.--Lat 41°23'04", long 81°31'39", in T.6N., R.11W., Cuyahoga County, on left bank at downstream side of bridge on State Highway 14 in Bedford, 5.5 miles upstream from mouth.

DRAINAGE AREA.--83.9 sq mi.

PERIOD OF RECORD.--November 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.18 ft above mean sea level.

AVERAGE DISCHARGE.--8 years (1963-71), 105 cfs (17.00 inches per year).

EXTREMES.--Current year: Maximum discharge, 1,530 cfs Feb. 20 (gage height, 6.06 ft); minimum, 9.9 cfs Aug. 9.

Period of record: Maximum discharge, 7,220 cfs July 20, 1969 (gage height, 10.10 ft) from rating curve extended above 3,400 cfs on the basis of contracted-opening measurement of peak flow; minimum, 5.2 cfs Aug. 19, 1963.

REMARKS.--Records good except for periods of no gage-height record which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	110	250	55	28	276	75	33	27	34	15	13
2	64	157	150	50	32	165	90	35	30	24	15	14
3	56	455	130	50	30	116	78	32	28	19	15	16
4	44	246	300	420	28	86	65	33	26	16	15	31
5	38	178	220	200	544	93	56	32	24	15	14	40
6	94	108	160	160	248	191	50	244	33	17	14	27
7	54	76	130	95	300	352	50	192	94	16	12	19
8	44	59	110	60	218	258	47	206	143	17	12	16
9	39	49	100	50	70	198	46	133	155	18	12	13
10	49	44	100	46	75	180	54	84	95	16	14	13
11	34	41	250	44	80	160	42	62	45	114	19	11
12	54	39	550	42	50	140	40	114	34	56	14	11
13	734	43	350	40	110	389	58	112	29	34	15	392
14	623	82	250	80	100	598	114	78	27	23	13	168
15	624	624	190	70	90	445	81	55	26	22	11	52
16	332	516	240	55	80	356	63	50	21	30	12	28
17	164	220	310	48	118	254	63	49	18	21	12	21
18	90	150	220	42	238	168	62	49	18	18	12	17
19	62	120	170	40	1,150	160	50	40	17	51	12	24
20	48	100	130	38	1,370	170	49	45	17	42	18	157
21	58	130	110	36	1,180	185	43	31	258	24	13	73
22	77	100	140	36	1,010	195	40	27	240	19	24	40
23	67	80	110	34	998	182	37	25	132	17	54	24
24	53	70	95	32	667	170	39	76	47	197	19	19
25	42	60	85	32	455	162	33	296	32	82	16	16
26	37	70	75	40	405	195	33	182	27	45	16	23
27	35	120	70	36	534	198	34	90	24	28	43	216
28	32	180	65	34	425	172	48	55	22	21	43	74
29	42	300	60	32	-----	133	46	42	222	19	18	46
30	116	450	60	30	-----	105	36	33	52	18	14	30
31	131	-----	55	28	-----	84	-----	29	-----	17	14	-----
TOTAL	4,005	4,977	5,235	2,155	10,673	6,536	1,622	2,564	1,963	1,090	550	1,644
MEAN	129	166	165	69.5	381	211	54.1	82.7	65.4	35.2	17.7	54.8
MAX	734	624	550	420	1,370	598	114	296	258	197	54	392
MIN	32	39	55	28	28	84	33	25	17	15	11	11
CFSM	1.54	1.98	2.01	.82	4.54	2.51	.64	.99	.78	.42	.21	.55
IN.	1.78	2.21	2.32	.96	4.73	2.90	.72	1.14	.87	.48	.24	.73

CAL YR 1970 TOTAL 45,310 MEAN 124 MAX 1,270 MIN 14 CFSM 1.48 IN 20.09
WTR YR 1971 TOTAL 43,014 MEAN 118 MAX 1,370 MIN 11 CFSM 1.41 IN 19.07

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	1830	6.06	1,530	2-20	1830	6.05	1,520

NOTE.--No gage-height record Nov. 17 to Jan. 19, Jan. 30 to Feb. 1.

STREAMS TRIBUTARY TO LAKE ERIE

201

04207500 Ohio Canal at Independence, Ohio

LOCATION.--Lat 41°23'25", long 81°37'30", in T.6N., R.12W., Cuyahoga County, on right bank at upstream side of dam, 0.3 mile upstream from Rockside Road and 0.8 mile northeast of Independence.

PERIOD OF RECORD.--September 1921 to May 1923, August 1927 to December 1935, October 1940 to current year.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 605.31 ft above mean sea level. Prior to Dec. 9, 1946, nonrecording gage, or water-stage recorder at site 0.4 mile downstream at various datums. Dec. 10, 1946, to Nov. 3, 1950, nonrecording gage at present site and datum.

EXTREMES.--Period of record: Maximum daily discharge, 277 cfs Jan. 22, 1959; no flow June 4, 1947, July 2-7, 1950, July 16 to Aug. 19, 1959.

REMARKS.--Records good. Water is diverted from Cuyahoga River into canal at headgates at Brecksville, 6 miles upstream. Water-quality records for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	85	89	76	88	96	88	80	71	55	53	32
2	83	84	87	75	77	37	89	80	71	53	34	37
3	83	99	87	75	89	12	87	80	72	53	2.6	35
4	80	97	95	93	96	83	85	79	69	53	2.6	49
5	80	95	97	87	96	85	85	80	68	52	2.4	50
6	80	88	95	77	91	88	84	95	70	52	2.4	49
7	80	74	95	82	97	97	84	88	70	52	2.4	49
8	78	72	94	82	93	104	83	90	73	52	2.2	48
9	78	72	94	82	100	91	82	69	69	53	2.2	49
10	78	80	93	83	101	89	82	72	67	52	2.2	49
11	79	79	94	83	91	91	81	80	65	52	2.2	49
12	80	78	96	82	94	91	80	87	64	53	2.2	48
13	85	78	90	82	96	101	81	85	64	52	2.2	59
14	87	80	97	87	95	93	87	80	63	51	35	63
15	82	85	95	84	94	91	82	80	62	51	45	54
16	91	74	95	82	93	96	81	80	61	52	34	52
17	88	79	100	81	95	107	81	81	61	52	23	51
18	87	76	90	79	95	112	81	80	61	51	25	51
19	85	76	90	80	89	110	80	78	60	51	25	50
20	84	78	87	79	85	110	80	77	59	53	26	54
21	84	84	80	79	87	109	78	76	72	52	27	57
22	87	83	82	79	97	109	77	75	62	51	29	53
23	83	82	82	79	88	106	78	73	57	51	27	51
24	83	82	80	79	88	102	80	74	56	53	27	50
25	82	81	78	79	99	95	80	89	55	58	26	49
26	81	80	77	81	102	94	80	78	55	55	26	50
27	83	82	78	70	104	91	81	76	54	54	28	53
28	81	84	77	22	99	90	80	75	54	54	29	52
29	82	87	77	99	-----	89	80	74	53	53	30	50
30	87	93	77	94	-----	88	80	72	55	53	30	52
31	89	-----	76	94	-----	88	-----	71	-----	53	28	-----
TOTAL	2,575	2,467	2,724	2,486	2,619	2,843	2,457	2,454	1,893	1,632	632.6	1,495
MEAN	83.1	82.2	87.9	80.2	93.5	91.7	81.9	79.2	63.1	52.6	20.4	49.8
MAX	91	99	100	99	104	112	89	95	73	58	53	63
MIN	78	72	76	22	77	12	77	69	53	51	2.2	32

CAL YR 1970 TOTAL 29,381 MEAN 80.5 MAX 109 MIN 67
WTR YR 1971 TOTAL 26,277.6 MEAN 72.0 MAX 112 MIN 2.2

STREAMS TRIBUTARY TO LAKE ERIE

04208000 Cuyahoga River at Independence, Ohio

LOCATION.--Lat 41°23'43", long 81°37'48", in T.6N., R.12W., Cuyahoga County, on left bank 240 ft downstream from bridge on Old Rockside Road, 0.8 mile northeast of Independence, and 3 miles downstream from Tinkers Creek.

DRAINAGE AREA.--707 sq mi.

PERIOD OF RECORD.--September 1903 to December 1905 (fragmentary), January to July 1906 (gage heights and discharge measurements only), September 1921 to May 1923, September 1927 to December 1935, March 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 583.57 ft above mean sea level. Sept. 21, 1903, to July 21, 1906, nonrecording gage at bridge 240 ft upstream at present datum. Sept. 28, 1921, to May 30, 1923, nonrecording gage at bridge 240 ft upstream at datum 2.42 ft higher. Sept. 5 to Oct. 8, 1927, nonrecording gage, and Oct. 9, 1927, to Dec. 31, 1935, Mar. 5, 1940, to June 19, 1969, water-stage recorder, at site 100 ft upstream and at present datum.

AVERAGE DISCHARGE.--40 years, (1921-22, 1927-35, 1940-71), 745 cfs (not including flow in Ohio Canal).

EXTREMES.--Current year: Maximum discharge, 7,160 cfs Feb. 23 (gage height, 13.26 ft); minimum, 108 cfs Sept. 12, 13.

Period of record: Maximum discharge, 24,800 cfs Jan. 22, 1959 (gage height, 22.41 ft), from rating curve extended above 17,000 cfs on basis of contracted-opening measurement of peak flow; minimum, 14 cfs Nov. 30, 1930; minimum daily, 21 cfs Aug. 28, 1933; minimum combined daily discharge of river and canal, 55 cfs Aug. 28, 1933.

REMARKS.--Records good. Natural flow of stream affected by diversions, storage reservoirs and power plants. Some diversion from the Tuscarawas drainage into this basin at Portage Lakes (see REMARKS for station 03116000). Water diverted into Ohio Canal at Brecksville, 6 miles above station, bypasses station. These records do not include flow in canal except above about 15,000 cfs, when channels merge; record of diversion published as Ohio Canal at Independence (see preceding page). Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--USF 1307: 1922-23(M), 1928-30(M), 1933(M), 1940(N), 1947(M), 1950(M). WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	640	1,410	650	283	2,780	980	322	314	449	169	212
2	379	1,010	1,250	600	330	2,560	1,070	307	303	307	195	192
3	393	2,880	1,220	600	298	2,310	960	307	390	258	237	226
4	310	1,290	2,140	2,400	283	1,940	880	296	342	205	226	212
5	266	902	1,810	2,130	2,750	1,660	830	303	330	175	219	275
6	375	682	1,220	1,350	2,260	1,720	810	1,530	498	175	216	209
7	298	620	1,040	858	1,440	2,750	765	1,140	557	179	209	192
8	266	565	1,040	787	1,050	1,990	720	1,360	1,150	185	195	160
9	248	510	924	803	770	1,630	700	1,010	770	189	185	154
10	273	495	1,120	759	809	1,490	710	770	543	192	209	148
11	266	447	3,410	704	754	1,520	600	645	370	516	247	145
12	276	424	3,600	620	1,000	1,470	552	1,000	303	408	216	139
13	3,340	424	2,250	535	1,160	2,280	615	925	275	258	195	1,420
14	2,320	500	1,670	891	919	2,480	960	740	240	216	145	1,390
15	1,920	2,920	1,530	765	820	2,220	715	585	247	198	157	561
16	1,190	2,440	2,070	560	754	2,120	630	543	233	307	157	390
17	847	1,770	1,750	500	908	1,890	625	690	216	230	175	390
18	710	1,330	1,500	415	1,620	1,830	600	561	216	182	166	318
19	635	1,190	1,270	406	4,620	1,880	557	462	195	251	166	303
20	600	1,200	1,110	370	6,590	1,970	539	426	205	650	189	585
21	620	1,200	1,280	346	5,170	1,810	453	358	2,550	254	185	860
22	743	1,020	1,290	370	4,410	1,880	354	303	1,080	219	293	462
23	580	875	1,120	358	6,610	1,630	362	268	600	202	279	366
24	490	710	919	330	4,800	1,500	342	310	370	870	180	326
25	411	605	875	338	3,770	1,390	326	1,830	300	690	169	310
26	379	560	842	420	3,730	1,360	314	905	282	326	169	358
27	358	704	803	366	4,150	1,310	322	595	265	286	338	760
28	334	919	776	358	3,410	1,260	358	516	240	230	362	543
29	362	1,190	700	354	-----	1,140	358	462	534	219	350	358
30	820	1,790	700	314	-----	1,060	358	395	503	202	293	458
31	858	-----	650	287	-----	1,010	-----	338	-----	192	265	-----
TOTAL	21,287	31,812	43,289	20,544	65,468	55,840	18,385	20,202	14,421	9,220	6,765	12,522
MEAN	687	1,060	1,396	663	2,338	1,801	613	652	481	297	218	417
MAX	3,340	2,920	3,600	2,400	6,610	2,780	1,070	1,830	2,550	870	362	1,420
MIN	248	424	650	287	283	1,010	314	268	195	175	145	139
CAL YR 1970	TOTAL 305,178	MEAN 836	MAX 5,570	MIN 117								
WTR YR 1971	TOTAL 319,755	MEAN 876	MAX 6,610	MIN 139								

STREAMS TRIBUTARY TO LAKE ERIE

203

04209000 Chagrin River at Willoughby, Ohio

LOCATION.--Lat 41°37'51", long 81°24'13", in T.9N., R.10W., Lake County, on left bank, 150 ft downstream from city waterworks dam, 800 ft downstream from East Branch, 1 mile southeast of Willoughby, and 5 miles upstream from mouth.

DRAINAGE AREA.--246 sq mi.

PERIOD OF RECORD.--July 1925 to November 1935, October 1939 to current year (July 1925 to September 1932 monthly run-off in inches, adjusted for diversion, published in WSP 1307; previously published run-off was unadjusted and should not be used).

GAGE.--Water-stage recorder. Datum of gage is 594.24 ft above mean sea level. Prior to Dec. 20, 1939, nonrecording gage 150 ft upstream at datum 7 ft higher.

AVERAGE DISCHARGE.--42 years, 313 cfs (17.28 inches per year) adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 5,030 cfs Feb. 20 (gage height, 8.30 ft); minimum, 11 cfs Sept. 3 (temporary regulation).
Period of record: Maximum discharge, 28,000 cfs Mar. 22, 1948 (gage height, 17.95 ft, from high-water mark in well), from rating curve extended above 14,000 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 3.0 cfs July 25, 26, 1934.
Flood in March 1913 reached a stage of 10.3 ft, from floodmark, former site and datum (discharge, 24,500 cfs).

REMARKS.--Records good. Water diverted at dam just above station for municipal supply of city of Willoughby. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1084: 1929(M), 1931(M). WSP 1307: 1926-28(M), 1930(M), 1932-35(M), 1942(M). WSP 1912: Drainage area.
See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	237	617	160	110	732	330	192	103	124	49	42
2	106	203	418	150	100	514	470	188	112	83	46	41
3	117	1,030	335	150	100	390	375	174	106	66	44	45
4	135	540	956	1,200	100	311	297	157	95	64	44	52
5	108	312	591	1,660	900	320	250	148	90	62	44	80
6	264	231	393	492	1,120	448	223	542	90	66	39	59
7	253	189	297	243	567	1,460	262	476	121	57	35	47
8	142	162	260	221	306	663	188	370	192	51	39	48
9	109	143	274	200	190	481	178	340	142	51	35	40
10	100	133	268	190	210	443	213	238	100	51	34	36
11	100	130	274	179	240	390	202	199	85	202	39	36
12	102	128	1,510	163	290	350	178	266	78	160	39	38
13	1,720	134	1,800	142	408	738	195	335	78	83	35	737
14	1,030	157	755	274	402	1,490	580	246	75	62	31	892
15	1,470	1,860	482	249	313	1,700	320	206	75	49	32	187
16	673	1,320	386	164	266	1,050	238	188	71	48	32	106
17	328	569	841	150	303	750	297	192	68	51	31	78
18	213	352	748	150	616	542	375	181	64	51	29	67
19	170	267	467	140	2,680	531	250	160	62	49	27	91
20	157	242	351	140	4,800	646	209	167	64	106	46	276
21	150	334	281	130	2,710	536	188	142	262	75	40	339
22	212	270	288	130	1,770	652	174	124	142	55	40	135
23	203	209	381	120	2,990	575	160	115	83	51	115	90
24	177	163	345	120	1,170	454	154	136	64	209	79	71
25	154	192	227	130	810	390	154	1,150	60	302	51	61
26	139	214	213	150	1,310	400	145	443	60	109	43	73
27	129	821	200	140	2,250	624	142	230	60	78	91	172
28	122	1,380	190	130	1,240	936	426	174	55	62	78	264
29	114	1,120	180	120	-----	864	254	142	330	53	77	124
30	263	1,290	170	120	-----	536	220	124	154	51	62	92
31	359	-----	160	110	-----	385	-----	112	-----	51	48	-----
TOTAL	9,441	14,332	14,658	7,817	28,271	20,301	7,587	7,857	3,141	2,632	1,474	4,419
MEAN	305	478	473	252	1,010	655	253	253	105	84.9	47.5	147
MAX	1,720	1,860	1,800	1,660	4,800	1,708	580	1,150	330	302	115	892
MIN	100	128	160	110	100	311	142	112	55	48	27	36
MEAN+	309	482	477	256	1,014	659	257	257	109	89.4	52.1	151
CFSM+	1.26	1.96	1.94	1.04	4.12	2.48	1.04	1.04	.44	.36	.21	.61
IN.+	1.45	2.19	2.24	1.20	4.29	3.09	1.17	1.21	.50	.42	.24	.69

CAL YR 1970 TOTAL 116,760 MEAN 320 MAX 3,800 MIN 40 MEAN+ 324 CFSM+ 1.32 IN.+ 17.89
WTR YR 1971 TOTAL 121,930 MEAN 334 MAX 4,800 MIN 27 MEAN+ 338 CFSM+ 1.37 IN.+ 18.67

PEAK DISCHARGE (BASE, 4,000 CFS)

+ Adjusted for municipal supply diversion to city of Willoughby.

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
2-20	1900	8.30	5,030	2-23	0500	7.51	4,160

STREAMS TRIBUTARY TO LAKE ERIE

04211500 Mill Creek near Jefferson, Ohio

LOCATION.--Lat 41°45'11", long 80°48'03", in T.11N., R.3W., Ashtabula County, on right bank at downstream side of bridge on State Highway 307, 1.9 miles northwest of Jefferson, and 3.5 miles downstream from Griggs Creek.

DRAINAGE AREA.--82.0 sq mi.

PERIOD OF RECORD.--March 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 822.59 ft above mean sea level (Ashtabula County bench mark). Prior to June 10, 1942, nonrecording gage at same site and datum. Since Nov. 27, 1962, supplementary water-stage recorder at crest of waterworks dam 0.2 mile upstream.

AVERAGE DISCHARGE.--29 years, 105 cfs (17.39 inches per year) unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,510 cfs Feb. 21 (gage height, 8.30 ft); minimum daily discharge, 0.05 cfs Aug. 14-20. Period of record: Maximum discharge, 9,810 cfs Jan. 22, 1959 (gage height, 12.50 ft), from rating curve extended above 3,700 cfs on basis of contracted-opening measurement of peak flow; no flow at times.

REMARKS.--Records good except those below 1 cfs which are poor. Water diverted 0.2 mile above station for part of municipal supply of city of Jefferson. Mean diversion for 1971 water year, 0.16 cfs. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	284	292	41	17	212	49	37	4.9	33	.65	.10
2	56	166	161	39	17	123	73	32	3.9	14	.35	.10
3	43	144	120	35	16	79	111	26	3.6	6.2	.45	.10
4	43	247	424	383	15	43	68	20	3.2	3.7	.35	.10
5	44	189	356	949	40	36	45	17	3.2	2.6	.30	.15
6	285	130	167	236	220	47	32	20	3.4	2.4	.25	.10
7	225	92	102	167	320	401	24	94	4.5	1.9	.20	.10
8	80	60	76	56	240	282	21	46	28	1.8	.15	.10
9	41	41	94	36	110	147	18	64	55	1.6	.10	.10
10	25	42	117	29	80	124	18	53	32	1.4	.10	.10
11	20	118	100	22	100	111	17	34	16	1.3	.10	.10
12	39	176	269	22	90	106	15	29	7.8	1.1	.10	.10
13	643	350	591	14	110	127	16	46	4.9	1.0	.10	.10
14	934	339	312	26	130	425	78	51	3.7	.85	.05	.30
15	753	1,110	188	34	130	934	88	34	3.0	.75	.05	2.4
16	432	1,020	120	26	120	446	50	24	2.5	.65	.05	1.8
17	229	304	276	22	130	267	42	19	2.2	.55	.05	1.5
18	136	135	420	21	140	147	81	14	2.2	.45	.05	1.1
19	81	82	232	14	443	174	71	10	2.5	.35	.05	1.3
20	51	64	164	19	1,900	367	40	8.3	2.2	.50	.05	1.9
21	34	197	105	19	1,730	178	26	6.7	7.5	.25	.10	1.7
22	75	180	68	19	650	232	20	6.5	4.1	.20	.10	1.3
23	139	101	110	20	650	229	16	5.7	2.5	.30	.15	1.3
24	89	56	160	20	651	141	14	6.3	2.1	2.5	.10	1.1
25	56	45	93	22	365	117	13	16	1.9	1.5	.10	1.1
26	38	47	64	24	491	126	12	24	2.1	1.3	.10	1.4
27	28	319	51	22	855	145	11	33	1.8	1.2	.30	3.1
28	20	978	48	22	545	152	29	22	1.8	1.1	.10	5.8
29	18	651	46	20	-----	132	53	15	219	1.0	.10	2.5
30	58	616	46	19	-----	89	50	9.8	81	.85	.10	1.8
31	204	-----	43	19	-----	63	-----	4.5	-----	.75	.10	-----
TOTAL	5,047	8,285	5,415	2,363	10,215	6,202	1,201	787.8	512.5	86.85	5.00	32.95
MEAN	163	276	175	76.2	325	200	40.0	25.4	17.1	2.80	.16	1.10
MAX	934	1,110	591	949	1,730	934	111	64	219	33	.65	5.8
MIN	18	41	43	18	15	36	11	5.7	1.8	.20	.05	.10
CFSM	1.99	3.37	2.13	.93	4.45	2.44	.49	.31	.21	.03	.002	.01
IN.	2.29	3.76	2.46	1.07	4.63	2.81	.54	.36	.23	.04	.002	.01

CAL YR 1970 TOTAL 45,166.56 MEAN 124 MAX 1,540 MIN .05 CFSM 1.51 IN 20.49
WTR YR 1971 TOTAL 40,153.10 MEAN 110 MAX 1,730 MIN .05 CFSM 1.34 IN 19.22

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
11-15	2200	7.40	1,640	2-21	0100	8.50	2,510

04212000 Grand River near Madison, Ohio

LOCATION.--Lat 41°44'26", long 81°02'46", Lake County, on downstream end of center pier of abandoned highway bridge, 800 ft upstream from State Highway 528, 0.8 mile upstream from Griswold Creek and 2.1 miles south of Madison.

DRAINAGE AREA.--581 sq mi.

PERIOD OF RECORD.--July 1922 to December 1935, February 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 674.47 ft above mean sea level, adjustment of 1912. Prior to Jan. 20, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years, 651 cfs (15.22 inches per year).

EXTREMES.--Current year: Maximum discharge, 8,360 cfs Feb. 21 (gage height, 9.29 ft); minimum, 0.52 cfs Aug. 22.
Period of record: Maximum discharge, 21,100 cfs Jan. 22, 1959 (gage height, 14.73 ft), from rating curve extended above 12,200 cfs on basis of estimates of peak flow over dam at site about 8 miles upstream with drainage area of 559 sq mi adjusted to gage site by 0.8 power of the drainage-area ratio; no flow July 31, Aug. 1, 2, 1934, Oct. 13-27, 1963.

REMARKS.--Records good except those for January which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--USF 1437: 1923-24(M), 1925-30, 1932(M), 1933, 1934(M), 1935, 1938(M), 1946, 1948(M). USF 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	366	1,020	2,420	312	130	3,750	542	242	109	300	9.0	37
2	223	921	1,447	302	127	2,650	483	241	99	164	7.5	21
3	157	937	1,010	290	120	1,860	532	217	84	91	6.3	14
4	142	998	1,590	926	110	1,140	528	188	68	55	5.6	13
5	137	1,010	2,140	3,930	330	666	422	168	58	38	4.8	12
6	293	764	1,450	2,580	1,600	532	354	170	49	31	3.8	14
7	694	550	1,030	1,100	2,300	1,520	308	235	176	24	3.2	11
8	251	387	764	800	1,420	2,370	280	308	262	18	2.8	11
9	215	300	630	900	900	1,550	255	453	157	15	2.1	5.9
10	142	270	595	600	600	1,350	243	449	128	14	2.1	4.5
11	106	363	595	220	700	1,220	239	354	95	13	2.1	3.2
12	90	545	1,080	220	650	1,020	231	282	73	12	2.1	2.8
13	918	542	2,720	180	800	949	225	253	53	12	1.9	12
14	3,020	1,320	2,500	210	514	1,640	325	242	43	12	1.5	29
15	3,480	4,020	3,760	258	991	3,980	397	400	38	10	1.5	24
16	2,550	5,790	1,320	210	858	3,720	354	351	34	13	1.5	26
17	1,370	3,450	1,390	180	805	2,930	339	245	29	13	1.5	48
18	722	1,530	1,880	150	542	2,220	537	188	26	12	1.3	43
19	422	1,290	1,610	130	1,800	1,650	615	161	75	10	1.2	31
20	302	879	1,260	130	5,490	1,850	532	143	27	9.0	1.2	32
21	233	921	921	140	6,060	1,590	404	120	38	7.5	1.2	31
22	275	949	860	140	6,490	1,530	318	99	95	6.6	.91	24
23	406	704	640	140	6,430	1,540	265	51	149	7.5	1.7	21
24	408	496	921	150	6,150	1,270	235	85	94	18	.91	34
25	342	364	752	160	4,530	1,070	223	145	56	27	.91	38
26	278	375	620	170	4,120	670	213	175	38	26	1.2	33
27	233	1,080	411	160	5,250	935	199	268	29	22	1.9	29
28	193	3,690	369	160	5,280	942	213	255	24	16	15	31
29	166	4,200	325	150	-----	970	318	237	429	13	25	34
30	276	3,580	325	140	-----	866	320	175	746	12	81	22
31	660	-----	388	130	-----	688	-----	134	-----	12	76	-----
TOTAL	19,142	43,555	35,466	14,568	67,881	90,838	10,449	7,214	3,331	1,033.6	268.73	691.4
MEAN	618	1,467	1,144	483	2,424	1,640	348	233	111	33.3	8.67	23.0
MAX	3,480	5,790	2,720	3,930	8,080	3,900	615	453	766	300	81	49
MIN	90	270	300	130	110	532	199	85	24	6.6	.91	2.8
CFSM	1.06	2.53	1.97	.83	4.17	2.82	.60	.40	.19	.06	.01	.04
IN.	1.23	2.82	2.27	.96	4.35	3.26	.67	.46	.21	.07	.02	.04

CAL YR 1970 TOTAL 246,607.0 MEAN 676 MAX 6,130 MIN 5.5 CFSM 1.16 IN 15.79
WTR YR 1971 TOTAL 255,297.73 MEAN 699 MAX 8,080 MIN .91 CFSM 1.20 IN 16.35

PEAK DISCHARGE (BASE, 5,500 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
11-16	0530	8.22	6,280	2-21	1330	9.29	8,360

STREAMS TRIBUTARY TO LAKE ERIE

04212500 Ashtabula River near Ashtabula, Ohio

LOCATION.--Lat 41°51'20", long 80°45'44", Ashtabula County, on left bank at downstream side of State Road bridge, 1.1 miles upstream from Hubbard Run, 1.3 miles southeast of Ashtabula, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--121 sq mi.

PERIOD OF RECORD.--July 1924 to December 1935, March 1939 to November 1947, March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 612.50 ft above mean sea level, unadjusted. Prior to Aug. 27, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 147 cfs (16.50 inches per year).

EXTREMES.--Current year: Maximum discharge, 2,310 cfs Feb. 21 (gage height, 4.31 ft); maximum gage height, 5.34 ft Feb. 20 (backwater from ice); no flow several days in July and August.

Period of record: Maximum discharge, 11,600 cfs Jan. 22, 1959 (gage height, 11.03 ft), from rating curve extended above 4,600 cfs; no flow at times during most years.

REMARKS.--Records good. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 954: 1929(M). WSP 974: 1942. WSP 1437: 1926, 1932, 1934. WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	410	380	70	34	335	81	72	8.8	39	.67	2.7
2	69	230	214	65	34	189	102	95	8.8	21	.50	1.4
3	49	216	170	80	32	149	174	49	9.6	11	.50	.84
4	65	548	731	464	32	109	117	42	7.6	7.6	.40	.92
5	78	342	500	1,290	80	92	79	36	8.2	5.3	.35	43
6	1,000	246	246	340	440	85	61	34	16	4.4	.30	17
7	454	167	156	193	635	527	51	40	93	2.7	.25	8.8
8	181	115	123	111	454	345	42	57	670	2.1	.20	4.4
9	95	78	123	86	246	205	35	84	305	1.6	.10	2.7
10	57	67	159	114	160	174	32	81	120	1.4	.05	1.8
11	45	181	139	72	200	166	32	49	63	1.2	.05	1.4
12	100	250	340	57	180	149	31	40	36	1.1	0	1.1
13	784	434	761	40	200	163	31	55	26	.84	0	4.4
14	1,620	410	422	50	240	428	726	72	22	.75	0	14
15	816	1,370	265	65	260	1,180	174	47	21	.90	0	17
16	452	1,180	186	55	240	621	97	32	16	.45	0	9.6
17	254	416	274	48	223	160	70	27	12	.35	0	7.0
18	170	210	512	44	280	214	76	22	9.6	.25	0	5.3
19	115	139	205	42	593	210	86	16	8.2	.20	0	6.4
20	75	114	205	40	1,500	512	59	14	7.0	.15	.05	7.0
21	55	340	142	38	1,960	255	43	12	8.8	.05	.40	14
22	75	330	111	38	978	325	34	11	9.6	0	.50	11
23	195	193	117	40	1,310	305	29	6.6	12	0	4.8	10
24	145	114	265	42	930	197	27	9.6	10	3.7	1.2	8.2
25	98	67	189	44	530	152	24	20	8.2	6.4	.84	5.3
26	67	105	146	46	663	146	27	43	5.8	3.9	.67	4.8
27	52	406	117	48	1,170	156	28	42	4.4	5.8	13	3.9
28	41	1,230	100	44	775	199	34	25	3.1	2.7	16	3.9
29	35	740	90	42	-----	152	74	22	72	1.4	22	3.1
30	55	803	80	40	-----	117	84	16	61	1.1	11	13
31	297	-----	75	38	-----	92	-----	11	-----	.92	5.8	-----
TOTAL	7,129	11,481	7,733	3,766	14,315	8,292	2,560	1,149.2	1,662.7	126.86	79.63	233.96
MEAN	230	383	249	121	514	267	85.3	37.1	55.4	4.09	2.57	7.80
MAX	1,020	1,370	761	1,290	1,560	1,180	726	84	670	38	22	43
MIN	35	67	75	38	32	89	24	5.6	3.1	0	0	.84
CFSM	1.90	3.17	2.06	1.00	4.25	2.21	.71	.31	.46	.03	.02	.06
IN.	2.19	3.53	2.38	1.16	4.42	2.55	.79	.35	.51	.04	.02	.07

CAL YR 1970 TOTAL 65,973.05 MEAN 180 MAX 1,980 MIN .45 CFSM 1.49 IN 20.16
WTR YR 1971 TOTAL 58,598.35 MEAN 161 MAX 1,560 MIN 0 CFSM 1.33 IN 18.02

PEAK DISCHARGE (BASE, 2,600 CFS).--No peak above base.

STREAMS TRIBUTARY TO LAKE ERIE

207

04213000 Conneaut Creek at Conneaut, Ohio

LOCATION.--Lat 41°55'37", long 80°36'15", Ashtabula County, on right bank at downstream side of Keefus Road bridge at Conneaut, and 6.4 miles upstream from mouth.

DRAINAGE AREA.--175 sq mi.

PERIOD OF RECORD.--July 1922 to December 1935, March 1950 to September 1961 (published as "at Amboy"), October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 610.30 ft above mean sea level, unadjusted. Prior to Aug. 17, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 248 cfs (19.25 inches per year).

EXTREMES.--Current year: Maximum discharge, 3,880 cfs Feb. 21 (gage height, 5.62 ft); maximum gage height, 10.84 ft Feb. 21 (backwater from ice); minimum daily discharge, 5.0 cfs Aug. 19.

Period of record: Maximum discharge, 17,000 cfs Jan. 22, 1959 (gage height, 11.70 ft); maximum gage height, 12.94 ft Mar. 4, 1934 (backwater from ice); minimum discharge, 0.2 cfs July 31, Aug. 1, 1933, Aug. 1, 2, 1934.

REMARKS.--Records good except January and February which are poor. Water-quality records for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 714: 1926. WSP 784: 1933. WSP 1437: 1923-25(M), 1926-30, 1931-32(M), 1933, 1935(M). WSP 1912: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	1,450	821	100	100	856	184	170	38	73	12	38
2	126	570	351	95	95	420	245	132	38	42	11	26
3	99	428	270	90	95	293	408	122	168	30	10	21
4	129	1,520	651	650	95	204	253	116	165	25	9.4	19
5	168	1,170	1,180	2,070	200	158	174	104	85	21	8.8	37
6	284	463	427	1,300	650	210	134	90	121	19	8.2	56
7	1,420	306	262	282	900	710	115	91	360	18	7.7	56
8	484	209	201	200	650	1,030	105	118	1,580	17	7.4	31
9	181	157	199	130	350	412	93	142	1,160	16	7.2	25
10	116	136	458	170	230	325	87	171	277	15	6.8	21
11	93	244	357	140	280	316	96	115	139	14	6.6	17
12	125	345	597	130	260	268	96	100	90	13	6.3	14
13	742	527	1,020	120	290	293	90	128	81	13	5.9	27
14	2,890	1,010	727	150	330	500	258	171	67	12	5.7	51
15	2,080	1,550	371	190	370	1,890	414	119	84	12	5.5	679
16	1,190	2,680	271	150	340	1,720	213	90	63	11	5.4	220
17	548	1,190	374	130	330	842	149	74	53	11	5.2	99
18	337	371	767	120	400	440	131	65	44	10	5.1	60
19	220	243	487	120	850	408	144	59	37	10	5.0	47
20	157	194	307	110	2,300	782	118	59	32	9.7	6.0	43
21	126	391	233	110	3,300	555	96	58	50	9.4	22	218
22	138	673	172	110	2,540	456	84	61	228	9.2	73	336
23	283	315	169	120	1,890	500	77	50	100	9.0	75	130
24	226	197	299	120	1,990	358	75	45	58	40	34	72
25	156	167	258	130	988	253	76	79	42	23	37	48
26	121	159	180	140	956	210	84	128	34	22	23	38
27	98	306	170	130	1,760	223	83	117	28	30	76	32
28	83	1,710	150	120	2,140	278	95	83	25	19	174	30
29	75	1,850	130	110	-----	319	135	66	42	16	102	186
30	91	1,180	120	110	-----	268	180	54	93	14	119	174
31	522	-----	110	100	-----	208	-----	45	-----	13	65	-----
TOTAL	13,492	21,711	12,089	7,747	24,679	15,695	4,492	3,022	5,382	596.3	945.2	2,851
MEAN	435	724	390	250	881	506	150	97.5	179	19.2	30.5	95.0
MAX	2,890	2,680	1,180	2,070	3,300	1,890	414	171	1,580	73	174	679
MIN	75	136	110	90	95	158	75	45	25	9.0	5.0	14
CFSM	2.49	4.14	2.23	1.43	5.03	2.89	.86	.56	1.02	.11	.17	.54
IN.	2.87	4.62	2.57	1.65	5.25	3.34	.95	.64	1.14	.13	.20	.61

CAL YR 1970 TOTAL 118,631 MEAN 325 MAX 3,700 MIN 17 CFSM 1.86 IN 25.22
WTR YR 1971 TOTAL 112,701.5 MEAN 309 MAX 3,300 MIN 5.0 CFSM 1.77 IN 23.96

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-14	2000	6.48	3,670	2-21	2000	6.62	3,880
11-16	1500	6.10	2,940				

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1971.

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Beaver River basin						
*03092099	Hinkley Creek at Charlestown, Ohio	Lat 41°09'16", long 81°08'51", Portage County, at bridge on Rock Spring Road, 0.6 mile south of Charlestown, 2.2 miles upstream from mouth.	7.85	1969-71	2-25-71 a8-16-71	23.7 .13
Yellow Creek basin						
03110600	North Fork Yellow Creek at Hammondsville, Ohio	Lat 40°33'27", long 80°42'20", Jefferson County, at bridge on State Highway 213, at north edge of Hammondsville.	59.4	1959, 1962-71	a8-19-71	2.81
Cross Creek basin						
03111000	Cross Creek at Mingo Junction, Ohio	Lat 40°15'03", long 80°37'43", Jefferson County, adjacent to County Road 74, 1.3 miles east of Gould, 1 mile southwest of Mingo Junction, 1.6 miles upstream from mouth.	125	1903, 1950, 1952-53, 1959, 1962-71	a8-19-71	9.54
Wheeling Creek basin						
03111550	Wheeling Creek at Brookside, Ohio	Lat 40°04'05", long 80°46'49", Belmont County, at bridge on County Road 28, in Brookside, 0.2 mile downstream from Mutton Hollow.	103	1959, 1962-71	a8-19-71	16.5
Sunfish Creek basin						
03114250	Sunfish Creek at Cameron, Ohio	Lat 39°46'00", long 80°56'09", Monroe County, at bridge on State Highway 78, 0.5 mile east of Cameron, 4 miles upstream from mouth.	99.6	1959, 1962-67, 1969-71	a8-18-71	1.44
Duck Creek basin						
03115800	Duck Creek at Stanleyville, Ohio	Lat 39°28'14", long 81°24'41", Washington County, at bridge on county road at Stanleyville, 1 mile upstream from Sugar Creek.	267	1959, 1962-71	a8-19-71	8.32
Muskingum River basin						
03115900	Tuscarawas River near East Liberty, Ohio	Lat 41°00'25", long 81°29'31", Summit County, at bridge on Arlington Road, 2.3 miles north of East Liberty.	33.1	1960-67, 1969-71	a8-16-71	11.0
*03116100	Little Chippewa Creek near Smithville, Ohio	Lat 40°53'39", long 81°48'46", Wayne County, at bridge on State Highway 5, 3.3 miles northeast of Smithville.	16.4	1965-67, 1969-71	a8-16-71	2.47
*03119700	Conotton Creek at Jewett, Ohio	Lat 40°21'59", long 81°00'13", Harrison County, at bridge on State Highway 9, in Jewett.	14.3	1965-71	a8-19-71	.58
03129400	Black Fork above Charles Mill Dam near Mifflin, Ohio	Lat 40°47'54", long 82°23'21", Ashland County, 0.2 mile downstream from Steigerwald Bridge, 2.1 miles northwest of Mifflin.	188	1943-67, 1970-71	a8-17-71	9.04
03131300	Black Fork at Melco, Ohio	Lat 40°41'52", long 82°21'37", Richland County, at Melco Dam, just downstream from mouth of Rocky Fork, 4 miles northwest of Perrysville.	301	1939-40, 1943, 1945, 1949-50, 1962-67, 1969-71	a8-17-71	46.3
*03136400	North Branch Kokosing River near Fredericktown, Ohio	Lat 40°30'08", long 82°34'18", Knox County, at bridge on county road, 2 miles northwest of Fredericktown, 2.7 miles upstream from East Branch.	45.5	1962-69, 1971	a8-19-71	2.32
03136900	Jelloway Creek at Howard, Ohio	Lat 40°24'24", long 82°19'15", Knox County, at bridge on U.S. Highway 36, at Howard.	74.0	1959, 1962-68, 1970-71	a8-19-71	8.63
03138800	Killbuck Creek at Wooster, Ohio	Lat 40°48'03", long 81°58'30", Wayne County, at bridge on Old Mansfield Road, 2 miles northwest of Wooster.	128	1959, 1962-67, 1970-71	a8-20-71	3.15

See footnotes at end of table, p.212

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

209

Discharge measurements made at low-flow partial-record stations during water year 1971--Continued

Discharge measurements made at low-flow partial-record stations during water year 1971--Continued						
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Muskingum River basin--Continued						
03140700	Buffalo Fork (head of Wills Creek) at Pleasant City, Ohio	Lat 39°54'15", long 81°33'14", Guernsey County, at bridge on U.S. Highway 21, at Pleasant City, 0.2 mile upstream from Buffalo Creek.	71.1	1959, 1962-67, 1969-71	a8-20-71	1.14
03140800	Buffalo Creek at Pleasant City, Ohio	Lat 39°54'10", long 81°33'03", Guernsey County, at bridge on State Highway 146, at Pleasant City, just upstream from mouth.	49.9	1959, 1962-67, 1969-71	a8-20-71	.01
03141900	Leatherwood Creek near Cambridge, Ohio	Lat 40°01'18", long 81°32'51", Guernsey County, at bridge on County Road 461, 2.2 miles east of Cambridge, 3.5 miles upstream from mouth.	88.0	1959, 1962-67, 1969-71	a8-20-71	1.06
*03147900	Timber Run near Zanesville, Ohio	Lat 39°57'00", long 82°03'07", Muskingum County, at bridge on private road adjacent to old U.S. Highway 40, 2 miles west of Zanesville.	10.6	1947-71	a8-19-71	.03
*03148300	Moxahala Creek at Roseville, Ohio	Lat 39°48'38", long 82°04'13", Muskingum County, at pumping station about 2,500 ft downstream from First Street Bridge in Roseville.	80.6	1961-71	a8-20-71	6.97
03148400	Moxahala Creek at Roberts, Ohio	Lat 39°51'17", long 82°03'23", Muskingum County, at county road bridge, 2.1 miles upstream from Jonathan Creek, 2.3 miles southeast of Roberts.	98.1	1962-71	a8-20-71	7.26
03148600	Moxahala Creek near Zanesville, Ohio	Lat 39°53'48", long 82°00'20", Muskingum County, at highway bridge .5 mile upstream from mouth, 1 mile east of South Zanesville.	302	1959, 1962-71	a8-20-71	10.2
03149500	Salt Creek near Chandlersville, Ohio	Lat 39°54'31", long 81°51'38", Muskingum County, at bridge on State Highway 146, 1 mile upstream from Buffalo Fork, 2 miles northwest of Chandlersville.	75.7	1935-47, 1959, 1962-71	a8-19-71 a8-20-71	.86 .70
Little Hocking River basin						
03155800	Little Hocking River near Little Hocking, Ohio	Lat 39°17'38", long 81°41'17", Washington County, at bridge on county road, 2.2 miles north of Little Hocking, 3.2 miles upstream from mouth.	47.9	1959-60, 1962-71	a8-18-71	.33
Hocking River basin						
03136700	Hush Creek near Sugar Grove, Ohio	Lat 39°38'18", long 82°30'42", Fairfield County, at bridge on Berne Township Road 294, 2 miles northeast of Sugar Grove.	229	1956, 1961-71	a8-17-71	10.0
03158200	Monday Creek at Doanville, Ohio	Lat 39°26'07", long 82°11'30", Athens County, at bridge on county road in Doanville, 1.6 miles upstream from mouth.	114	1956, 1961-71	a8-17-71	7.07
03159520	Federal Creek near Stewart, Ohio	Lat 39°20'30", long 81°53'03", Athens County, at bridge on State Highway 339, 2.5 miles north of Stewart, 4 miles north of U.S. Highway 50.	136	1956, 1962-71	a8-17-71	4.27
Leading Creek basin						
03160050	Leading Creek near Middleport, Ohio	Lat 39°00'31", long 82°05'07", Meigs County, at first private bridge 1.5 miles upstream from State Highway 7 bridge, 1.8 miles northwest of Middleport.	117	1956, 1962-71	a8-18-71	3.56
Raccoon Creek basin						
03201900	Raccoon Creek near Prattville, Ohio	Lat 39°13'51", long 82°17'11", Vinton County, at bridge on U.S. Highway 50, 1.5 miles upstream from Russell Run, 5 miles east of Prattville.	200	1951-53, 1959, 1961-71	a8-18-71	11.2
Little Scioto River basin						
03216700	Little Scioto River at Sciotoville, Ohio	Lat 38°46'19", long 82°32'38", Scioto County, at bridge just east of State Highway 335, 0.2 mile upstream from Swamp Valley Run, 1.5 miles northeast of junction of U.S. Highway 52 and State Highway 335 in Sciotoville.	223	1959, 1962-67, 1969-71	a8-23-71	38.9
Scioto River basin						
03217400	Scioto River near Kenton, Ohio	Lat 40°38'50", long 83°38'20", Hardin County, at bridge on County Road 130, 1.5 miles west of Kenton.	129	1961-67, 1969-71	a8-20-71	7.19
03217600	Hush Creek near LaRue, Ohio	Lat 40°33'33", long 83°19'57", Marion County, at bridge on County Road 38, 0.5 mile upstream from mouth, 3 miles southeast of LaRue.	103	1956, 1961-67, 1969-71	a8-20-71	.04
03228700	Blacklick Creek near Groveport, Ohio	Lat 39°53'26", long 82°51'50", Franklin County, at bridge on Winchester Pike, 2 miles upstream from mouth, 2.5 miles northeast of Groveport.	57.4	1950, 1959, 1961-69, 1971	a8-20-71	10.0

See footnotes at end of table, p. 212

Discharge measurements made at low-flow partial-record stations during water year 1971--Continued

Measurements taken at 10-foot partial-record stations during water year 1971--Continued					Measurements	
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Date	Discharge (cfs)
Scioto River basin--Continued						
03229800	Walnut Creek near Ashville, Ohio	Lat 39°40'56", long 82°58'30", Pickaway County, at bridge on U.S. Highway 23, 0.5 mile upstream from mouth, 1.2 miles southwest of Ashville.	285	1954, 1961-67, 1969-71	a8-20-71	31.8
03230200	Big Darby Creek at Plain City, Ohio	Lat 40°06'25", long 83°15'35", Madison County, at bridge on State Highway 161 at Plain City.	151	1950, 1961-67, 1969-71	a8-19-71	1.71
03230300	Little Darby Creek at Chuckery, Ohio	Lat 40°06'42", long 83°23'30", Union County, at bridge on State Highway 161 at Chuckery.	71.4	1950, 1962-67, 1969-71	a8-19-71	3.45
*03230600	Hominy Creek at Circleville, Ohio	Lat 39°35'26", long 82°35'25", Pickaway County, at bridge adjacent to State Highway 56, 0.4 mile southeast of railroad crossing at east edge of Circleville.	5.66	1947, 1952, 1962-67, 1969-71	a8-19-71	.29
03231300	Kinnikinnick Creek near Kinnikinnick, Ohio	Lat 39°26'23", long 82°58'35", Ross County, at bridge on old U.S. Highway 23, 1 mile upstream from mouth, 1.5 miles northwest of Kinnikinnick.	36.2	1954, 1958, 1961-69, 1971	a10- 5-70 a8-17-71	10.8 9.63
03232400	Rattlesnake Creek near New Petersburg, Ohio	Lat 39°16'30", long 83°25'03", Highland County, at bridge on State Highway 753, 1.8 miles northeast of New Petersburg.	277	1954, 1956, 1961-67, 1969-71	a8-19-71	6.37
*03235000	Salt Creek at Tarlton, Ohio	Lat 39°33'20", long 82°46'51", Pickaway County, at bridge on State Highway 159 in Tarlton.	11.5	1946-61, 1962-67, 1969-71	a10- 5-70 a8-17-71	.84 .15
*03235955	Salt Creek above damsite near Londonderry, Ohio	Lat 39°17'26", long 82°44'45", Vinton County, at bridge on State Highway 671, 0.5 mile east of county line, 2.8 miles northeast of Londonderry.	268	1962-69, 1971	a10- 5-70 a8-17-71	41.0 26.2
03237050	Sunfish Creek near Piketon, Ohio	Lat 39°00'42", long 83°03'43", Pike County, at bridge on county road, 0.5 mile upstream from mouth, 5 miles southwest of Piketon.	144	1953, 1961-67, 1969-71	a8-23-71	15.0
03237200	Scioto Brush Creek at Rushtown, Ohio	Lat 38°50'13", long 83°01'16", Scioto County, at bridge on State Highway 104, 0.2 mile north of Rushtown.	273	1956, 1961-67, 1969-71	a9- 2-71	47.2
Great Miami River basin						
03262500	Great Miami River at Piqua, Ohio b/	Lat 40°09'03", long 84°13'44", Miami County, at Ash Street (U.S. Highway 36) Bridge in Piqua.	866	1914, 1915-17, 1948, 1962-71	5- 6-71 7-16-71 a8-17-71	201 157 56.3
03262800	Lost Creek near Troy, Ohio b/	Lat 40°01'05", long 84°09'28", Miami County, at Knoop Road Bridge, 0.2 mile south of State Highway 41, 2.8 miles southeast of Troy, 2.8 miles southwest of Castown, 4.3 miles upstream from mouth	58.3	1959, 1962-71	10- 9-70 11-25-70 1- 5-71 3-29-71 4- 9-71 5-11-71 6-24-71 7-16-71 a8-16-71	1.42 3.66 74.8 27.5 21.1 37.8 4.22 9.52 3.39
03263200	Stillwater River at Webster, Ohio b/	Lat 40°11'20", long 84°28'42", Darke County, at bridge on State Highway 185, at Webster, 1 mile downstream from Swamp Creek.	181	1959, 1962-67, 1969-71	a8-27-71	4.99
03271000	Wolf Creek at Dayton, Ohio b/	Lat 39°46'00", long 84°14'12", Montgomery County, at West Riverview Avenue Bridge in Dayton, 1.8 miles upstream from mouth.	68.7	1939-50, 1953-71	11- 2-70 4- 6-71 6- 9-71 a9- 8-71	44.9 31.9 16.0 10.8
03271300	Holes Creek near Kettering, Ohio b/	Lat 39°39'15", long 84°11'45", Montgomery County, at Mad River Road Bridge, 200 feet south of Alexandria-Bellbrook Road, 2.8 miles southwest of Kettering.	18.7	1961-71	10-19-70 4-26-71 8-10-71 a9-15-71	1.92 3.43 1.12 2.59
03271400	Bear Creek at Ellerton, Ohio b/	Lat 39°40'23", long 84°18'35", Montgomery County, at bridge on Farmersville-West Carrollton Road, 0.2 mile south of Ellerton, 1.2 miles upstream from mouth.	37.8	1959, 1962-71	a10- 5-70 12-10-70 3-23-71 5-13-71 7-14-71 8-20-71	1.76 7.10 27.6 34.6 3.20 1.84
03271620	Great Miami River at Franklin, Ohio b/	Lat 39°33'47", long 84°18'18", Warren County, at bridge on State Highway 123, in Franklin.	2,727	1963-71	a11- 3-70	656

See footnotes at end of table, p. 212

Discharge measurements made at low-flow partial-record stations during water year 1971--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Great Miami River basin--Continued						
03271700	Clear Creek at Franklin, Ohio <u>b/</u>	Lat 39°33'06", long 84°18'18", Warren County, at bridge on Shaker Road at south edge of Franklin, 1.6 miles upstream from mouth.	51.5	1959, 1961-71	10-21-70 12-10-70 2- 2-71 3-25-71 5-11-71 7-13-71 a9-13-71	10.5 5.47 4.83 35.9 53.0 3.68 16.5
03272200	Elk Creek at Miltonville, Ohio <u>b/</u>	Lat 39°30'04", long 84°27'35", Butler County, at county road bridge at east edge of Miltonville, 1.5 miles upstream from mouth.	46.2	1959, 1961-71	10-19-70 12- 8-70 2- 2-71 3-26-71 5-18-71 a8-20-71	4.75 9.15 5.09 27.6 27.1 1.19
03272300	Dicks Creek near Excello, Ohio <u>b/</u>	Lat 39°28'25", long 84°23'51", Butler County, at Yankee Road Bridge, 1.3 miles southeast of Excello, 2.5 miles upstream from mouth.	44.7	1959, 1961-71	10-28-70 12- 8-70 3-18-71 6-10-71 8- 6-71 a9-13-71	8.87 13.4 47.1 14.7 12.7 18.7
03274200	Indian Creek near Millville, Ohio <u>b/</u>	Lat 39°21'46", long 84°38'36", Butler County, at Hamilton-New London Road Bridge, 1.9 miles south of Millville, 4.3 miles upstream from mouth.	103	1959, 1962-71	10-21-70 12- 9-70 4-22-71 6-23-71 a9- 1-71	86.2 20.4 26.9 21.5 .79
03274600	Great Miami River at New Baltimore, Ohio <u>b/</u>	Lat 39°15'47", long 84°40'04", Hamilton County, at bridge on Little Rock Road, at New Baltimore.	3,814	1961-71	8-18-71 9-22-71	549 1,030
Streams tributary to Lake Erie						
04177100	East Branch St. Joseph River near Pioneer, Ohio	Lat 41°39'56", long 84°32'31", Williams County, at bridge on U.S. Highway 20, 1.2 miles southeast of Pioneer.	158	1955-56, 1962-67, 1969-71	a8-24-71	6.26
04180950	St. Marys River at Mendon, Ohio	Lat 40°40'35", long 84°31'07", Mercer County, at bridge on State Highway 707, at Mendon.	297	1955, 1962-69, 1971	a8-25-71	19.1
04185900	Auglaize River near Buckland, Ohio	Lat 40°39'11", long 84°15'35", Auglaize County, at bridge on National Road, 2 miles north of Buckland.	158	1955, 1961-67, 1969-71	a8-24-71	8.76
04188300	Blanchard River at Mt. Blanchard, Ohio	Lat 40°53'28", long 83°33'50", Hancock County, at bridge on State Highway 103, 0.6 mile southwest of Mt. Blanchard, and 0.4 mile west of intersection with State Highway 37. <u>c/</u>	109	1955-56, 1962-67, 1969-71	a8-25-71	.48
04190400	Little Auglaize River near Melrose, Ohio	Lat 41°03'33", long 84°24'01", Paulding County, at bridge 0.4 mile above Middle Creek, 2.2 miles southeast of Melrose.	186	1955-56, 1962-67, 1970-71	a8-24-71	.18
04192800	Beaver Creek near Grand Rapids, Ohio	Lat 41°23'37", long 83°50'42", Wood County, at bridge on Wintergreen Road, 1.8 miles southeast of Grand Rapids.	185	1955-56, 1962-65, 1967, 1970-71	a8-24-71	.63
04194200	Toussaint Creek near Limestone, Ohio	Lat 41°32'54", long 83°14'29", Ottawa County, at bridge 1.2 miles west of Limestone.	79.0	1959-65, 1967, 1969-71	a8-25-71	3.47
04194300	Middle Branch Portage River at Mermill, Ohio	Lat 41°17'55", long 83°39'02", Wood County, at bridge on U.S. Highway 25, at Mermill.	74.8	1959-60, 1962-65, 1967, 1969-71	a8-24-71	.03
04194400	South Branch Portage River near Six Points, Ohio	Lat 41°18'41", long 83°30'36", Wood County, at bridge on Greensburg Pike, 3 miles northeast of Six Points.	99.5	1959-60, 1962-65, 1967, 1969-71	a8-24-71	6.47
04196200	Broken Sword Creek at Nevada, Ohio	Lat 40°49'34", long 83°09'11", Wyandot County, at bridge on State Highway 182, 1 mile northwest of Nevada, 5 miles upstream from mouth.	83.8	1959, 1962-65, 1967, 1969-71	a8-26-71	.43
*04197100	Honey Creek at Melmore, Ohio	Lat 41°01'20", long 83°06'35", Seneca County, at bridge on State Highways 67 and 100 at Melmore, 1.5 miles upstream from Buckeye Creek.	149	1961-65, 1967, 1969-71	a8-26-71	2.37

See footnotes at end of table, p. 212

Discharge measurements made at low-flow partial-record stations during water year 1971--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Streams tributary to Lake Erie--Continued						
*04197300	Wolf Creek at Bettsville, Ohio	Lat 41°14'58", long 83°14'08", Seneca County, at bridge on State Highway 390 at Bettsville, 3.5 miles upstream from East Branch.	66.2	1959-65, 1967, 1969-71	a8-25-71	0.74
*04197400	East Branch Wolf Creek at Fort Seneca, Ohio	Lat 41°12'40", long 83°10'50", Seneca County, at bridge on County Road 30, 0.8 mile west of Fort Seneca, 2.2 miles downstream from Snuff Creek.	70.1	1961-65, 1967, 1969-71	a8-25-71	1.06
04198010	Green Creek near Fremont, Ohio	Lat 41°23'36", long 83°01'35", Sandusky County, at bridge on U.S. Highway 6, 5 miles northeast of Fremont.	81.5	1959, 1961-65, 1967-71	a8-17-71	15.4
04198015	Cold Creek near Castalia, Ohio	Lat 41°25'12", long 82°48'02", Erie County, 0.4 mile downstream from bridge on Homegardner Road, 1.2 miles downstream from Blue Hole Outlet, 1.5 miles northeast of Castalia.	(d)	1950, 1962, 1964-67, 1969-71	8-18-71	19.6
04198020	West Branch Huron River near Monroeville, Ohio	Lat 41°16'46", long 82°40'32", Huron County, at bridge on Lamoreaux Road, 2.5 miles northeast of Monroeville, 2.5 miles upstream from mouth.	220	1960-67, 1970-71	a8-17-71	8.05
04199300	Vermilion River at Clarksfield, Ohio	Lat 41°11'44", long 82°24'53", Huron County, at bridge on Zenobia Road at Clarksfield.	130	1960, 1962-67 1970-71	8-18-71	.22
04200050	West Branch Black River near Oberlin, Ohio	Lat 41°15'54", long 82°10'47", Lorain County, at bridge at corner of Kipton Nickel Plate Road and West Road, 2.5 miles southeast of Oberlin.	81.9	1960, 1962-67, 1970-71	8-18-71	.36
04201400	West Branch Rocky River at West View, Ohio	Lat 41°21'03", long 81°54'12", on Cuyahoga-Lorain County line, at bridge on State Highway 252 at West View.	147	1951, 1960, 1962-67, 1970-71	a8-18-71	4.34
*04210100	Hoskins Creek at Harts Grove, Ohio	Lat 41°36'00", long 80°57'12", Ashtabula County, at culvert on State Highway 534, 0.4 mile south of Harts Grove, 4,000 feet downstream from former site.	5.42	1965-67 1969-71	2-25-71 8-17-71	33.4 .03

* Also a crest-stage station.

† Operated as a continuous-record gaging station.

a Water quality records for the current year are published in part 2 of this report.

b Miami Conservancy District station, data furnished.

c Prior to 1970 water year, at site 1.3 miles downstream at bridge on Brooklyn Street (Drainage area, 112 sq mi).

d Flow largely from limestone springs.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

213

The following table contains annual maximum discharge for crest-stage stations. A crest-stage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1971

Annual maximum discharge at crest-stage partial-record stations during water year 1971							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Beaver River basin							
*03092099	Hinkley Creek at Charlestown, Ohio	Lat 41°09'16", long 81°08'51", Portage County, at bridge on Rock Spring Road, 0.6 mile south of Charlestown, 2.2 miles upstream from mouth.	7.85	1970-71	2-23-71	11.26	235
03094900	Walnut Creek at Cortland, Ohio	Lat 41°19'49", long 80°43'28", Trumbull County, at Main Street Bridge in Cortland, 1.8 miles upstream from mouth.	8.45	1947-71	12-12-70	2.58	122
03098700	Crab Creek at Youngstown, Ohio	Lat 41°07'20", long 80°38'08", Mahoning County, at bridge on Hubbard Road at Youngstown, 2 miles upstream from mouth.	14.0	1959-71	2-23-71	5.7	600
03102900	Clear Creek at Dilworth, Ohio	Lat 41°26'45", long 80°39'56", Trumbull County, at bridge on State Highway 170 at Dilworth, 1.1 miles south of Gustavus, 3 miles upstream from mouth.	1.13	1947-71	2-23-71	9.63	67
Little Beaver Creek basin							
03109000	Lisbon Creek at Lisbon, Ohio	Lat 40°46'55", long 80°45'53", Columbiana County, at city water works of Lisbon, 800 feet upstream from bridge on State Highway 164.	6.19	1946-62* 1963-71	2-23-71	4.08	434
Duck Creek basin							
03115600	Barnes Run near Summerfield, Ohio	Lat 39°46'20", long 81°22'26", Noble County, at bridge on county road adjacent to State Highway 78, 2.5 miles southwest of Summerfield.	3.46	1947-71	2-23-71	9.84	273
Muskingum River basin							
*03116100	Little Chippewa Creek near Smithville, Ohio	Lat 40°53'39", long 81°48'46", Wayne County, at bridge on State Highway 5, 3.3 miles northeast of Smithville.	16.4	1947-71	2-23-71	11.52	710
03119600	Jefferson Creek near Jewett, Ohio	Lat 40°22'57", long 80°58'36", Harrison County, at culvert adjacent to State Highway 9, 1.4 miles northeast of Jewett.	2.54	1947-71	5- 5-71	12.29	160
*03119700	Conotton Creek at Jewett, Ohio	Lat 40°21'59", long 81°00'13", Harrison County, at bridge on State Highway 9 in Jewett.	14.3	1947-71	5- 5-71	13.38	781
03123400	Dundee Creek at Dundee, Ohio	Lat 40°35'35", long 81°36'13", Tuscarawas County, at culvert on State Highway 93, 0.4 mile upstream from mouth, 0.5 mile northeast of Dundee.	.71	1966-71	5- 5-71	20.93	67
03125200	Spencer Creek at Barnesville, Ohio	Lat 40°00'15", long 81°10'40", Belmont County, at culvert on State Highway 8, 1.1 miles north of center of Barnesville.	1.79	1966-71	5- 5-71	18.17	117
03129300	Whetstone Creek tributary near Olivesburg, Ohio	Lat 40°53'15", long 82°24'25", Ashland County, at culvert on State Highway 96, 1.1 miles east of Olivesburg.	.236	1950-71	2-23-71	4.37	20
*03136400	North Branch Kokosing River near Fredericktown, Ohio	Lat 40°30'08", long 82°34'18", Knox County, at bridge on county road, 2 miles northwest of Fredericktown, 2.7 miles upstream from East Branch.	45.5	1963-71	2-22-71	6.25	1,800
03138900	Jennings Ditch tributary near Wooster, Ohio	Lat 40°44'45", long 81°55'48", Wayne County, at culvert on State Highway 76, 0.8 mile upstream from mouth, 4 miles south of Wooster.	.90	1946, 1966-71	5- 6-71	19.22	111
03144800	Etna Creek at Etna, Ohio	Lat 39°58'08", long 82°40'55", Licking County, at culvert on State Highway 310, 0.7 mile north of Etna.	1.10	1966-71	6-25-71	10.15	61
03145600	Otter Fork near Centerburg, Ohio	Lat 40°17'35", long 82°43'09", Knox County, at culvert on State Highway 3, 1.2 miles west of Centerburg.	3.17	1947-71	2-23-71	11.30	70
*03147900	Timber Run near Zanesville, Ohio	Lat 39°57'00", long 82°03'07", Muskingum County, at bridge on private road adjacent to old U.S. Highway 40, 0.5 mile west of junction of Interstate 70 with old U.S. Highway 40, 2 miles west of Zanesville.	10.6	1947-71	2-22-71	10.34	360
*03148300	Moxahala Creek at Roseville, Ohio	Lat 39°48'38", long 82°04'13", Muskingum County, at pumping station about 2,500 feet downstream from First Street bridge in Roseville.	80.8	1964-71	2-22-71	12.77	2,650

See footnotes at end of table, p. 216

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1971--Continued							
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Muskingum River basin--Continued							
03150100	Bell Creek at McConnelsville, Ohio	Lat 39°38'50", long 81°50'36", Morgan County, at culvert on State Highway 60, 0.1 mile upstream from mouth, 0.5 mile east of McConnelsville.	1.07	1947-48, 1950-71	2-22-71	2.78	105
03150600	Tupper Creek at DeVola, Ohio	Lat 39°28'24", long 81°27'58", Washington County, at culvert on State Highway 60 at DeVola.	.99	1966-71	10-31-70	10.45	165
Hocking River basin							
03158100	Hayden Run at Haydenville, Ohio	Lat 39°28'57", long 82°19'06", Hocking County, at culvert on U.S. Highway 33, 0.5 mile east of Haydenville.	1.04	1966-71	5- 8-71	21.85	86
Scioto River basin							
03219600	Eagon Run near Warrensburg, Ohio	Lat 40°19'42", long 83°09'11", Delaware County, at Herbert Eagon farm, 0.9 mile upstream from mouth, 1.7 miles northeast of Warrensburg, 5 miles northwest of Delaware.	.123	1950-62, 1963-71	2-22-71	3.96	2.8
03226200	Delaware Run near Delaware, Ohio	Lat 40°18'28", long 83°06'35", Delaware County, at culvert on county highway, 400 feet south of State Highway 37, 1 mile west of Delaware Corporation line.	5.84	1947-71	2-22-71	10.80	180
03226850	Linworth Run near Linworth, Ohio	Lat 40°06'24", long 83°02'35", Franklin County, at culvert on Linworth Road, 0.4 mile upstream from mouth, 1.2 miles north of Linworth.	.22	1966-71	6-25-71	18.34	37
03226900	Fishinger Road Creek at Upper Arlington, Ohio	Lat 40°01'27", long 83°02'38", Franklin County, at culvert on Kenny Road at Upper Arlington.	.45	1964-71	6-25-71	19.65	290
03228000	Scioto Big Run at Briggsdale, Ohio	Lat 39°54'56", long 83°03'55", Franklin County, at bridge on U.S. Highway 62 at Briggsdale, 2.8 miles northeast of Grove City, 4 miles upstream from mouth.	11.0	1947-58, 1959-71	7-25-71	5.48	650
*03230400	Big Darby Creek at Darbydale, Ohio	Lat 39°50'58", long 83°11'20", Franklin County, at McKinley Bridge at Darbydale.	449	1964-71	2-23-71	12.56	6,240
*03230600	Hominy Creek at Circleville, Ohio	Lat 39°35'26", long 82°55'25", Pickaway County, at bridge adjacent to State Highway 58, 0.4 mile southeast of railroad crossing at east edge of Circleville.	5.66	1947-71	6-26-71	5.28	480
03231600	East Fork Paint Creek near Sedalia, Ohio	Lat 39°42'36", long 83°27'48", Madison County, at culvert on State Highway 38, 1.8 miles southeast of Sedalia.	3.82	1947-71	6-25-71	13.10	245
03234100	Indian Creek at Massieville, Ohio	Lat 39°15'42", long 82°58'08", Ross County, at bridge adjacent to U.S. Highway 23, 0.2 mile south of Massieville.	9.60	1947-71	6-25-71	17.98	4,500
*03235000	Salt Creek at Tarlton, Ohio	Lat 39°33'20", long 82°46'51", Pickaway County, at bridge on State Highway 159 at Tarlton.	11.5	1947-61, 1962-71	2-22-71	59.65	800
03235200	Little Blackjack Branch near South Bloomingville, Ohio	Lat 39°27'23", long 82°30'25", Hocking County, at culvert on State Highway 664, 5.5 miles northeast of South Bloomingville.	.89	1966-71	2-22-71	20.08	143
03235400	West Branch Tar Hollow Creek at Tar Hollow State Park, Ohio	Lat 39°23'35", long 82°45'12", Ross County, in Tar Hollow State Park, 300 feet upstream from Tar Hollow Creek, 5 miles south of Adelphi.	.305	1950-71	2-22-71	4.92	16
*03235995	Salt Creek above damsite near Londonderry, Ohio	Lat 39°17'26", long 82°44'45", Vinton County, at bridge on State Highway 671, 0.5 mile east of Ross County line, 2.8 miles north-east of Londonderry.	268	1963-71	2-22-71	17.92	14,700
03236100	South Branch Little Salt Creek at Jackson, Ohio	Lat 39°02'38", long 82°38'35", Jackson County, at culvert adjacent to State Highway 139, 800 feet south of Jackson High School, 1 mile upstream from mouth.	3.76	1947-71	2-22-71	14.33	350
03237210	Rose Run near Portsmouth, Ohio	Lat 38°48'07", long 82°59'03", Scioto County, at culvert on U.S. Highway 23, 2.9 miles north of Portsmouth city limits.	1.04	1966-71	12-22-70	14.08	27
Ohio Brush Creek basin							
03237300	West Branch Turkey Run near Winchester, Ohio	Lat 38°56'56", long 83°40'19", Adams County, at culvert on State Highway 32, 1.3 miles west of Winchester.	.89	1956-71	8- 4-71	12.83	227

See footnotes at end of table, p. 216

Annual maximum discharge at crest-stage partial-record stations during water year 1971--Continued								
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum			
					Date	Gage height (feet)	Discharge (cfs)	
Whiteoak Creek basin								
03238400	Harwood Creek near Fayetteville, Ohio	Lat 39°07'51", long 83°51'00", Brown County, at culvert on State Highway 131, 0.2 mile west of junction of State Highways 131 and 134, 6 miles southeast of Fayetteville.	0.88	1966-71	7-11-71	20.08	200	
03238600	Higgins Run near Higginsport, Ohio	Lat 38°49'10", long 83°57'28", Brown County, at culvert on State Highway 221, 150 feet upstream from mouth, 2 miles north of Higginsport.	.55	1966-71	9-11-71	21.74	462	
Ray Run basin								
03238700	Ray Run near Moscow, Ohio	Lat 38°51'15", long 84°12'00", Clermont County, at culvert on State Highway 743, 1.5 miles east of Moscow.	.86	1966-71	8-26-71	21.00	170	
Little Miami River basin								
*03239000	Little Miami River near Selma, Ohio	Lat 39°48'36", long 83°44'21", Clark County, at bridge on Selma Pike, 2.3 miles northwest of Selma, 3.1 miles upstream from North Fork.	48.9	1952-58/ 1959-71	6-26-71	7.38	1,500	
*03239500	North Fork Little Miami River near Pitchin, Ohio	Lat 39°49'40", long 83°46'38", Clark County, at bridge on county road, 1.1 miles upstream from Goose Creek, 1.3 miles southwest of Pitchin.	28.9	1952-58/ 1959-71	6-26-71	4.15	215	
03241600	Shawnee Creek at Xenia, Ohio	Lat 39°40'32", long 83°55'32", Greene County, at bridge on U.S. Highway 68, 0.7 mile southeast of intersection with U.S. Highway 42 in Xenia.	4.21	1948-71	2-22-71	11.99	210	
03242100	Wayne Creek at Waynesville, Ohio	Lat 39°31'08", long 84°04'47", Warren County, at culvert on State Highway 73, 0.8 mile southeast of intersection of State Highway 73 and U.S. Highway 42 at Waynesville.	1.01	1966-71	5- 8-71	21.50	240	
03247100	Patterson Run near Owensville, Ohio	Lat 39°07'38", long 84°06'44", Clermont County, at bridge on private road, 200 feet north of U.S. Highway 50, 0.5 mile upstream from Brushy Fork, 1.2 miles east of Owensville.	3.34	1947-71	2-22-71	4.00	567	
Great Miami River basin								
03262750	Millers Ditch at Tipp City, Ohio	Lat 39°57'59", long 84°10'22", Miami County, at culvert on 4th Street in Tipp City.	1.50	1966-71	9- 3-71	11.56	58	
03263100	Poplar Creek near Vandalia, Ohio	Lat 39°52'10", long 84°11'21", Montgomery County, at culvert on Interstate Highway 75, 1.2 miles upstream from mouth, 1.5 miles southeast of Vandalia.	3.11	1947-71	6-26-71	3.12	182	
03263700	Bridge Creek near Greenville, Ohio	Lat 40°04'13", long 84°37'45", Darke County, at culvert on State Highway 49, 2.2 miles south of Greenville.	4.83	1947-71	2-22-71	13.10	288	
03265100	Hog Run tributary at Laura, Ohio	Lat 40°00'30", long 84°25'26", Miami County, at culvert on State Highway 571, 0.3 mile upstream from mouth, 1 mile northwest of Laura.	.463	1950-71	2-22-71	8.42	23	
03268300	Beaver Creek at Brighton, Ohio	Lat 39°55'46", long 83°34'04", Clark County, at culvert on U.S. Highway 40, 0.2 mile west of Brighton.	3.33	1961-71	6-25-71	10.64	280	
03269000	Buck Creek at Springfield, Ohio	Lat 39°55'57", long 83°49'02", Clark County, at Plus Street Bridge in Springfield, 0.3 mile upstream from concrete control dam, 2.2 miles upstream from mouth.	139	1913, 1914-21/ 1924-49/ 1959-71	6-25-61	6.67	3,400	
03272900	Collins Creek at Collinsville, Ohio	Lat 39°31'05", long 84°36'53", Butler County, at culvert on U.S. Highway 127, 0.3 mile upstream from mouth, 0.4 mile northwest of Collinsville.	.94	1966-71	7-10-71	21.89	315	
03274100	Blake Run near Reilly, Ohio	Lat 39°27'59", long 84°45'22", Butler County, 600 feet upstream from culvert on Stevenson Road, 2.2 miles north of Reilly, 3 miles upstream from mouth.	.29	1939-40, 1942-43, 1947-71	5- 7-71	2.33	8.4	
Streams tributary to Lake Erie								
04176900	Hill Ditch near Richards, Ohio	Lat 41°39'54", long 83°40'05", Lucas County, at culvert on U.S. Highway 20, 1.4 miles west of Richards, 3.4 miles north of intersection of U.S. Highway 20 and State Highway 2.	3.35	1947-71	2- 4-71	12.37	61	

See footnotes at end of table, p. 216

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1971--Continued								
Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum			
					Date	Gage height (feet)	Discharge (cfs)	
Streams tributary to Lake Erie--Continued								
04177400	Eagle Creek tributary near Montpelier, Ohio	Lat 41°35'10", long 84°40'50", Williams County, at culvert on State Highway 107, 3.5 miles west of Montpelier.	1.84	1950-71	2- 4-71	10.17	27	
04186800	King Run near Harrod, Ohio	Lat 40°43'56", long 83°53'47", Allen County, at culvert on U.S. Highway 30 South, 0.9 mile west of Allen-Hardin County line, 2.2 miles northeast of Harrod.	.53	1966-71	5- 6-71	20.73	100	
04189100	Tiderishi Creek near Jenera, Ohio	Lat 40°55'53", long 83°43'39", Hancock County, at culvert on State Highway 698, 2.2 miles north of Jenera.	4.65	1947-71	5- 6-71	13.56	220	
04190500	Holler Creek at Ohio City, Ohio	Lat 40°46'16", long 84°38'15", Van Wert County, at bridge on county road, 0.8 mile west of Ohio City.	5.14	1947-48 ^a 1949-71	2- -71	7.50	200	
04192900	Reitz Run at Waterville, Ohio	Lat 41°29'50", long 83°42'35", Wood County, at culvert on State Highways 64 and 65, 0.1 mile upstream from mouth, 0.5 mile southeast of Waterville.	1.06	1966-71	5-25-71	17.82	17	
04196700	St. James Run near Upper Sandusky, Ohio	Lat 40°46'51", long 83°18'12", Wyandot County, at bridge on State Highway 67, 3.5 miles southwest of Upper Sandusky.	5.29	1947-71	5- 6-71	12.81	320	
*04197100	Money Creek at Melmore, Ohio	Lat 41°01'20", long 83°06'35", Seneca County, at bridge on State Highways 67 and 100 at Melmore, 1.5 miles upstream from Buckeye Creek.	149	1961-71	2- -71	7.07	1,300	
*04197300	Wolf Creek at Bettsville, Ohio	Lat 41°14'58", long 83°14'08", Seneca County, at bridge on State Highway 590 at Bettsville, 3.5 miles upstream from East Branch Wolf Creek.	66.2	1961-71	2- -71	5.94	1,280	
*04197400	East Branch Wolf Creek at Fort Seneca, Ohio	Lat 41°12'40", long 83°10'50", Seneca County, at bridge on County Road 30, 0.8 mile west of Fort Seneca, 2.2 miles downstream from Snuff Creek.	70.1	1961-71	5-25-71	10.36	1,290	
04197500	Havens Creek at Havens, Ohio	Lat 41°17'36", long 83°11'50", Sandusky County, at bridge on County Road 12, 0.8 mile southwest of Havens, 1.8 miles upstream from mouth.	4.28	1947-49 ^a 1950-71	2-22-71	6.36	170	
04198100	Norwalk Creek near Norwalk, Ohio	Lat 41°13'58", long 82°32'28", Huron County, at bridge on county road, 300 feet south of junction of State Highways 601 and 18, 4 miles southeast of Norwalk, 6 miles upstream from mouth.	4.92	1947-71	5-25-71	12.69	173	
04199800	Neff Run near Litchfield, Ohio	Lat 41°12'33", long 82°01'26", Lorain County, at culvert on State Highway 76, 0.7 mile north of county line, 2.8 miles north of Litchfield.	.76	1966-71	2- -71	18.59	51	
04200100	Plum Creek at Oberlin, Ohio	Lat 41°17'15", long 82°13'12", Lorain County, at bridge on Professor Street in Oberlin.	4.83	1947-71	2- -71	12.25	235	
04210090	Montville Ditch at Montville, Ohio	Lat 41°36'04", long 81°03'03", Geauga County, at culvert on State Highway 528, 0.4 mile south of Montville.	.29	1969-71	12-15-70	9.92	18	
*04210100	Hoskins Creek at Hartsgrove, Ohio	Lat 41°36'00", long 80°57'12", Ashtabula County, at culvert on State Highway 534, 0.4 mile south of Hartsgrove, 4,000 feet downstream from former site.	as.42	1947-71	7- 5-69 2-19-71	13.46 7.50	b215 182	
04212600	Hubbard Run tributary at Ashtabula, Ohio	Lat 41°50'38", long 80°46'42", Ashtabula County, at culvert on Seven Hills Road, 0.5 mile upstream from mouth, 1.6 miles south of center of Ashtabula.	.88	1966-71	2-22-71	14.48	34	

* Also a low-flow partial-record station.
^a Operated as a continuous-record station.
^a Gage relocated in 1970 water year.
^b Revised.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

217

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1971

Discharge measurements made at miscellaneous sites during 1950-1970						
Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 3						
Muskingum River basin						
Tuscarawas River	Muskingum River	Lat 40°20'11", long 81°28'58", Tuscarawas County, 2 miles northeast of Port Washington, Ohio	2,392	-	9- 2-71 9- 3-71	*427 *407
Jerome Fork	Mohican River	Lat 40°48'07", long 82°12'01", Ashland County, at bridge on old U.S. Highway 30, at Jeromeville, Ohio, 1 mile above Old Town Run	120	1925-49, 1959, 1961-64, 1967	7- 3-69	†427,000
Scioto River basin						
Scioto River	Ohio River	Lat 38°51'51", long 83°00'26", Scioto County, 1,500 feet below mouth of Crowe Hollow Creek, 1 mile south of Lucasville, Ohio	8,179	-	6-18-71	2,330
Great Miami River basin						
Spring Creek	Great Miami River	Lat 40°05'18", long 84°10'27", Miami County, adjacent to DeWeese Road, 600 feet south of Rusk Road, 2.5 miles above mouth, 3 miles north-northeast of Troy, Ohio. <u>b/c/</u>	21.0	1968-69	10- 9-70 11-18-70 2-16-71 3-29-71 3-11-71 6-24-71 7-16-71 8-25-71	*.04 *.37 *.80 *10.4 12.9 *.79 *1.76 *.21
Lost Creek	Great Miami River	Lat 40°01'05", long 84°09'28", Miami County, at Knoop Road bridge, 0.2 mile south of State Highway 41, 2.8 miles southeast of Troy, Ohio, 2.8 miles southwest of Casstown, 4.3 miles upstream from mouth. <u>b/c/</u>	56.3	1959, 1962-70	2-24-71 6-27-71	132 †7,160
Honey Creek	Great Miami River	Lat 39°58'10", long 84°06'33", Miami County, at bridge on Rudy Road, 0.5 mile below Indian Creek, 3.5 miles east of Tipp City. <u>b/</u>	72.8	1969-70	6-24-71	*7.76
Honey Creek	Great Miami River	Lat 39°58'15", long 84°08'20", Miami County, at bridge on State Highway 202, 2 miles northeast of Tipp City, Ohio, 1 mile above mouth. <u>b/</u>	87.8	1959, 1964-65	6-19-71	*14.0
West Channel (head of Cedar Run)	Mad River	Lat 40°03'20", long 83°47'48", Champaign County, at bridge on Woodburn Road, 3.7 miles northeast of Tremont City, Ohio	.50	-	8-18-71	*.31
East Channel	Cedar Run	Lat 40°03'20", long 83°47'41", Champaign County, at bridge on Woodburn Road, 3.7 miles northeast of Tremont City, Ohio	.31	-	8-18-71	*.26
Cedar Run	Mad River	Lat 40°02'54", long 83°47'51", Champaign County, at bridge on Dallas Road, 3.2 miles northeast of Tremont City, Ohio.	1.15	-	8-18-71	*1.07
Chapman Creek	Great Miami River	Lat 40°00'38", long 83°50'08", Clark County, at bridge on Upper Valley Pike at Tremont City, Ohio, 0.6 mile upstream from mouth.	24.0	1968-69	4-12-71	*9.59
Great Miami River	Ohio River	Lat 39°33'48", long 84°18'18", Warren County, at bridge on State Highway 123, in Franklin, Ohio. <u>b/c/</u>	2,727	1957, 1959, 1961, 1963-70	2-18-71	12,500
Clear Creek	Great Miami River	Lat 39°33'06", long 84°18'18", Warren County, at bridge on Shaker Road at south edge of Franklin, Ohio, 1.6 miles above mouth. <u>b/c/</u>	51.5	1961-70	5- 6-71	1,640
Elk Creek	Great Miami River	Lat 39°30'05", long 84°27'33", Butler County, at county road bridge at east edge of Miltonville, Ohio, 1.5 miles above mouth. <u>b/c/</u>	46.2	1959, 1961-70	2-22-71	1,940
Great Miami River	Ohio River	Lat 39°28'53", long 84°26'33", Butler County, at bridge on State Highway 73 at Trenton, Ohio. <u>b/</u>	3,189	-	2-24-71 5-28-71	17,700 1,650
Great Miami River	Ohio River	Lat 39°31'10", long 84°24'30", Butler County, at Central Avenue Bridge in Middletown, Ohio. <u>b/</u>	3,134	1957-59, 1961, 1964, 1967-70	7-24-71 9-22-71	*842 *707
Fourmile Creek	Great Miami River	Lat 39°30'28", long 84°43'02", Butler County, at bridge on State Highway 73 at Oxford, Ohio. <u>b/</u>	116	-	2-13-71	771
Fourmile Creek	Great Miami River	Lat 39°26'58", long 84°42'08", Butler County, near western end of Wallace Road, 2.2 miles southwest of Darrtown, Ohio. <u>b/</u>	127	1964-65, 1969-70	6-30-71	*11.1

See footnotes at end of table, p.218

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1971--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 3 Great Miami River basin--Continued						
Sevensmile Creek	Fourmile Creek	Lat 39°37'45", long 84°38'40", Preble County, at bridge on State Highway 725 at Camden, Ohio. ^b /	69.0	1970	1-28-71 2- 5-71 2-23-71 3-11-71 4-29-71 6-28-71 8-26-71	*17.4 395 349 80.5 *18.0 *8.19 *2.47
Indian Creek	Great Miami River	Lat 39°21'45", long 84°38'35", Butler County, at Hamilton-New London Road bridge, 1.9 miles south of Millville, Ohio, 4.3 miles above mouth. ^b /, ^c /	102	1959, 1961-70	3-18-71	116
Great Miami River	Ohio River	Lat 39°15'47", long 84°40'04", Hamilton County, at bridge on Little Rock Road at New Baltimore, Ohio. ^b /, ^c /	3,814	1961-70	3-11-71 4-13-71	5,660 4,120
Whitewater River	Great Miami River	Lat 39°11'14", long 84°47'37", Hamilton County, 6.3 mile above county road bridge, 1.5 miles above mouth, 2.0 miles northwest of Hooven, Ohio	1,467	-	8-24-71	*194
Part 4 Streams tributary to Lake Erie						
West Branch Tributary	West Branch Huron River	Lat 41°06'08", long 82°43'53", Huron County, at Holiday Lake dam, 3.2 miles north of Willard, Ohio.	13.8	-	7- 5-69	*2,630
East Branch Huron River	Huron River	Lat 41°14'59", long 83°38'57", Huron County, at bridge on county road, 1.2 miles northwest of Norwalk, Ohio, 1.5 miles below Cole Creek.	85.5	1924-35, 1959	7- 8-69	*22,000

* Base flow.

* Operated as a continuous-record gaging station.

* Peak flow.

* Estimated.

* Data furnished by Miami Conservancy District.

* At low-flow partial-record station.

INDEX

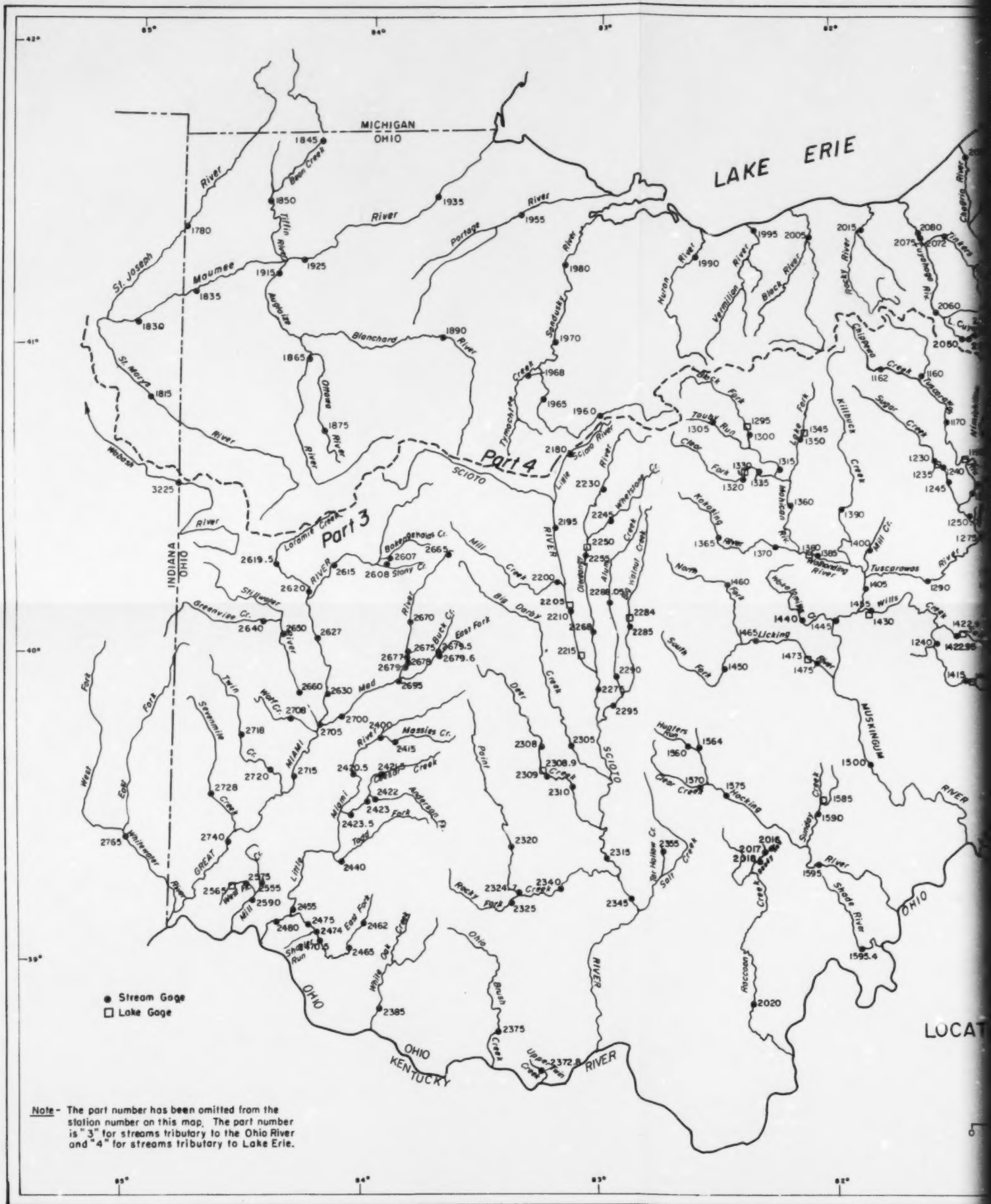
	Page		Page
Accuracy of field data and computed results....	8-9	Canton, Middle Branch Nimishillen Creek at.....	41
Acre-foot, definition of.....	2	Captina Creek at Armstrongs Mills.....	34
Adamsville, Raccoon Creek at.....	95	Carthage, Mill Creek at.....	143
Africa, Alum Creek at.....	106	Central College, Big Walnut Creek at.....	105
Akron, Little Cuyahoga River at.....	197	Cfs-day, definition of.....	2
Springfield Lake Outlet at.....	198	Chagrin River at Willoughby.....	203
Allentown, Ottawa River at.....	180	Chapman Creek at Tremont City.....	217
Alliance, Mahoning River at.....	14	Charles Mill Reservoir, contents of.....	80,82
Alum Creek, at Africa.....	106	Chester, Shade River near.....	91
at Columbus.....	107	Chillicothe, Scioto River at.....	113
Anderson Fork near New Burlington.....	129	Chippewa Creek at Easton.....	38
Antwerp, Maumee River at.....	176	Claridon, Olentangy River at.....	100
Armstrong Mills, Captina Creek at.....	34	Clear Creek (Beaver River basin) at Dilworth... 213	
Ashley, Whetstone Creek near.....	101	Clear Creek (Great Miami River basin)	
Ashtabula, Ashtabula River near.....	206	at Franklin.....	211,217
Ashtabula River near Ashtabula.....	206	Clear Creek (Hocking River basin)	
Athens, Hocking River at.....	90	near Rockbridge.....	86
Atwood Reservoir, contents of.....	79,81	Clear Fork, at Butler.....	58
Auglaize River, near Duckland.....	211	below Pleasant Hill Dam, near Perrysville.... 59	
near Defiance.....	182	Clendenen Reservoir, contents of.....	79,82
near Fort Jennings.....	179	Clinton, Tuscarawas River at.....	37
Bainbridge, Paint Creek near.....	115	Cold Creek near Castalia.....	212
Barnes Run near Summerfield.....	213	Collins Creek at Collinsville.....	215
Barretts Mills, Rocky Fork near.....	116	Collinsville, Sevenmile Creek at.....	169
Batavia, East Fork Little Miami River near.... 136		Columbus, Alum Creek at.....	107
Beach City, Sugar Creek at.....	46	Scioto River at.....	104
Sugar Creek near.....	47	Conneaut, Conneaut Creek at.....	207
Beach City Reservoir, contents of.....	79,82	Conneaut Creek at Conneaut.....	207
Bean Creek at Powers.....	177	Conotton Creek at Jewett.....	208,213
Bear Creek at Ellerton.....	210	Contents, definition of.....	2
Beaver Creek (Great Miami River basin)		Control, definition of.....	2
at Brighton.....	215	Cooperation.....	1-2
Beaver Creek (Maumee River basin) near		Cortland, Mosquito Creek near.....	24
Grand Rapids.....	211	Coshocton, Mill Creek near.....	66
Beaver River basin, crest-stage partial-record 213		Muskingum River near.....	67
stations in.....	13	Crab Creek at Youngstown.....	213
diversions and storage in.....	14-28	Crawford, Tymochtee Creek at.....	188
gaging-station records in.....	208	Crest-stage partial-record stations.....	213-216
low-flow partial-record stations in.....	29-30	Cross Creek at Mingo Junction.....	208
reservoirs in.....	200	Cubic feet per second per square mile,	
Bedford, Tinkers Creek at.....	214	definition of.....	2
Bell Creek at McConnellsville.....	98	Cubic foot per second, definition of.....	2
Bellepoint, Mill Creek near.....	194	Cuyahoga River, at Hiram Rapids.....	195
Berea, Rocky River near.....	16	at Independence.....	202
Berlin Center, Mahoning River near.....	15	at Old Portage.....	199
Mill Creek near.....	29,30	Darbyville, Big Darby Creek at.....	109
Berlin Reservoir, contents of.....	214	Data, accuracy of.....	8
Big Darby Creek, at Darbydale.....	109	explanation of.....	4
at Darbyville.....	210	other available.....	10
at Plain City.....	93	Dayton, Great Miami River at.....	164
Big Four Hollow Creek near Lake Hope.....	105	Mad River near.....	163
Big Walnut Creek, at Central College.....	108	De Graff, Bokengehalas Creek near.....	144
Black Fork, at Loudonville.....	57	Stony Creek near.....	145
at Melco.....	208	Decatur, Indiana, St. Marys River at.....	174
above Charles Mill Dam, near Mifflin..... 208		Deer Creek, at Mount Sterling.....	110
below Charles Mill Dam, near Mifflin..... 55		at Williamsport.....	112
Black River, at Elyria.....	193	near Pancoastburg.....	111
West Branch, near Oberlin.....	212	Deer Creek Reservoir, contents of.....	120,121
Blacklick Creek near Groveport.....	209	Defiance, Auglaize River near.....	182
Blake Run near Heily.....	215	Maumee River near.....	183
Blanchard River, at Mt. Blanchard.....	211	Definition of terms.....	2-3
near Findlay.....	181	Delaware, Olentangy River near.....	102
Bloomfield, Little Muskingum River at.....	35	Delaware Reservoir, contents of.....	120,121
Bokengehalas Creek near De Graff.....	144	Delaware Run near Delaware.....	214
Bolivar Reservoir, contents of.....	79,81	Dicks Creek near Exello.....	211
Bourneville, Paint Creek near.....	117	Dillon Falls, Licking River near.....	77
Bradford, Greenville Creek near.....	151	Dillon Reservoir, contents of.....	81,83
Bridge Creek near Greenville.....	215	Dillonvale, Short Creek near.....	33
Broken Sword Creek at Nevada.....	211	Discharge, definition of.....	2
Brookeville, Indiana, Whitewater River at..... 171		Discharge at partial-record stations and	
Buck Creek, at Springfield.....	215	miscellaneous sites.....	208-218
East Fork, near New Moorefield.....	161	Discharge during 1971 water year, graph of.... 12	
near New Moorefield.....	160	Discharge measurements at miscellaneous sites.. 217-218	
Bucyrus, Sandusky River near.....	186	Discharge records collected by other agencies.. 11	
Buffalo Creek at Pleasant City.....	209	Dover, Tuscarawas River near.....	45
Buffalo Fork at Pleasant City.....	209	Dover Reservoir, contents of.....	79,81
Burr Oak Reservoir, contents of.....	88	Downstream order and station numbers.....	4
Butler, Clear Fork at.....	58	Drainage area, definition of.....	3
Caesar Creek, at Harveysburg.....	130	Dresden, Muskingum River at.....	73
near Wellman.....	131	Dublin, Scioto River near.....	99
near Xenia.....	128	Duck Creek, at Stanleyville.....	208
Cedar Run near Tremont City.....	217	Duck Creek basin, crest-stage partial-record	
Cambridge, Wills Creek at.....	69	stations in.....	213
Salt Fork below Salt Fork Dam near..... 70		low-flow partial-record stations in.....	208
		Dundee Creek at Dundee.....	213

	Page		Page
Eagle City, Mad River at.....	158	Huron River, East Branch, at Norwalk.....	218
Mad River at St. Paris Pike at.....	159	West Branch, near Monroeville.....	212
Moore Run near.....	157	Unnamed tributary, near Willard.....	218
Eagle Creek (Beaver River basin) at		Hydrologic bench-mark station.....	3
Phalanx Station.....	22	Hydrologic conditions.....	10
Eagle Creek (Maumee River basin) tributary		graph of.....	12
near Montpelier.....	216		
Eagon Run near Warrensburg.....	214	Independence, Cuyahoga River at.....	202
East Channel Cedar Run near Tremont City.....	217	Ohio Canal at.....	201
East Liverpool, Little Beaver Creek near.....	31	Indian Creek (Great Miami River basin),	
Easton, Chippewa Creek at.....	38	near Millville.....	211, 218
Elk Creek at Miltonville.....	211, 217	Indian Creek (Scioto River basin)	
Elyria, Black River at.....	193	at Massieville.....	214
Englewood, Stillwater River at.....	153	Indian Fork below Atwood Dam, near	
Enterprise, Hocking River at.....	87	New Cumberland.....	44
Etna Creek at Etna.....	213	Ingomar, Twin Creek near.....	167
Explanation of data.....	4-8	Introduction.....	1
Federal Creek near Stewart.....	209	Jefferson, Mill Creek near.....	204
Findlay, Blanchard River near.....	181	Jefferson Creek near Jewett.....	213
Fishinger Road Creek at Upper Arlington.....	214	Jelloway Creek at Howard.....	208
Fort Jennings, Auglaize River near.....	179	Jennings Ditch tributary near Wooster.....	213
Fourmile Creek, at Oxford.....	217	Jerome Fork at Jeromeville.....	217
near Darrtown.....	217		
Frazzysburg, Wakatomika Creek near.....	72	Kale Creek near Pricetown.....	18
Fremont, Sandusky River near.....	190	Killbuck, Killbuck Creek at.....	65
		Killbuck Creek, at Killbuck.....	65
Gage height, definition of.....	3	at Wooster.....	208
Gaging station, definition of.....	3	King Run near Harrod.....	216
Georgetown, Whiteoak Creek near.....	124	Kinnikinnick Creek near Kinnikinnick.....	210
Germantown, Twin Creek near.....	168	Kinsman, Pymatuning Creek at.....	28
Glouster, Sunday Creek at.....	89	Kokosing River, at Millwood.....	63
Grand River near Madison.....	205	at Mount Vernon.....	62
Great Miami River, at Dayton.....	164	North Branch, near Fredericktown.....	208, 213
at Franklin.....	210, 217		
at Hamilton.....	170	Lake Erie, streams tributary to, crest-stage	
at Miamisburg.....	166	partial-record stations for.....	215-216
at Middletown.....	217	discharge measurements at miscellaneous	
at New Baltimore.....	211, 218	sites for.....	218
at Piqua.....	210	gaging-station records for.....	173-207
at Sidney.....	146	low-flow partial-record stations for.....	211-212
at Taylorsville.....	150	Lake Fork below Mohicanville Dam,	
at Trenton.....	217	near Mohicanville.....	60
at Troy.....	149	Lake Hope, Big Four Hollow Creek near.....	93
Great Miami River at Hamilton, runoff during		Sandy Run above Big Four Hollow Creek near...	92
1971 water year, graph of.....	12	Sandy Run near.....	94
Great Miami River basin, crest-stage		Lancaster, Hocking River at.....	85
partial-record stations in.....	215	Hunters Run at.....	84
discharge measurements at miscellaneous		Leading Creek near Middleport.....	209
sites in.....	217-218	Leatherwood Creek near Cambridge.....	209
gaging-station records in.....	144-171	Leavittsburg, Mahoning River at.....	23
low-flow partial-record stations in.....	210-211	Leesville, McGuire Creek near.....	43
Green Creek near Fremont.....	212	Leesville Reservoir, contents of.....	79, 81
Greenfield, Paint Creek near.....	114	Licking River, below Dillon Dam, near	
Greenville Creek near Bradford.....	151	Dillon Falls.....	77
Greer, Mohican River at.....	61	near Newark.....	76
Griggs Reservoir, contents of.....	120, 121	North Fork, at Utica.....	75
		South Fork, near Hebron.....	74
Hamilton, Great Miami River at.....	170	Linworth Run near Linworth.....	214
Hammondsville, Yellow Creek near.....	32	Lisbon Creek at Lisbon.....	213
Harveysburg, Caesar Creek at.....	130	List of gaging stations, in downstream order,	
Harwood Creek near Fayetteville.....	215	for which records are published.....	IV
Havens Creek at Havens.....	216	Little Auglaize River near Melrose.....	211
Hayden Run at Haydenville.....	214	Little Beaver Creek basin, crest-stage	
Hebron, South Fork Licking River near.....	74	partial-record stations in.....	213
Higby, Scioto River at.....	118	Little Beaver Creek near East Liverpool.....	31
Higgins Run near Higginsport.....	215	runoff during 1971 water year, graph of.....	12
Hill Ditch near Richards.....	215	Little Blackjack Branch near	
Hinkley Creek at Charlestown.....	208, 213	South Bloomingville.....	214
Hiram Rapids, Cuyahoga River at.....	195	Little Chippewa Creek near Smithville.....	208, 213
Hocking River, at Athens.....	90	Little Cuyahoga River, at Massillon Road,	
at Enterprise.....	87	Akron.....	197
at Lancaster.....	85	at Mogadore.....	196
Hocking River basin, crest-stage partial-record		Little Darby Creek at Chukery.....	210
stations in.....	214	Little Hocking River near Little Hocking.....	209
gaging-station records in.....	84-90	Little Miami River, at Milford.....	133
low-flow partial-record stations in.....	209	at Plainville.....	139
reservoir in.....	88	East Fork, at Perintown.....	138
Hog Run tributary at Laura.....	215	at Williamsburg.....	135
Holes Creek near Kettering.....	210	near Batavia.....	136
Home Creek near New Philadelphia.....	49	near Marathon.....	134
Hominy Creek at Circleville.....	210, 214	near Oldtown.....	125
Honey Creek (Sandusky River basin) at Melmore..	211, 216	near Selma.....	215
Honey Creek (Great Miami River basin)		near Spring Valley.....	127
near Tipp City.....	217	North Fork, near Pitchin.....	215
Hoover Reservoir, contents of.....	120, 121	Little Miami River basin, crest-stage	
Hoskins Creek at Hartsgrove.....	212, 216	partial-record stations in.....	215
Hubbard Run tributary at Ashtabula.....	216	gaging-station records in.....	125-139
Hunters Run at Lancaster.....	84	Little Muskingum River at Bloomfield.....	35
Huron River, at Milan.....	191	Little Salt Creek, South Branch, at Jackson....	214

	INDEX		221
	Page		Page
Little Scioto River (Little Scioto River basin)		Muskingum River basin, crest-stage	
at Sciotoville.....	209	partial-record stations in.....	213-214
Little Scioto River (Scioto River basin)		discharge measurements at miscellaneous	217
above Marion.....	96	sites in.....	36
Little Stillwater Creek below Tappan Dam,		diversions and storage in.....	37-78
at Tappan.....	53	gaging-station records in.....	208-209
Location of gaging stations, map of.....	Inside back cover	low-flow partial-record stations in.....	79-83
Lockington, Loramie Creek at.....	148	reservoirs in.....	
Loramie Creek, at Lockington.....	148		
near Newport.....	147	Neff Run near Litchfield.....	216
Lost Creek near Troy.....	210, 217	Nellie, Walhonding River at.....	64
Loudonville, Black Fork at.....	57	New Burlington, Anderson Fork near.....	129
Low-flow partial-record stations.....	208-212	New Corydon, Indiana, Wabash River near.....	172
Lovellville, Mahoning River at.....	27	New Cumberland, Indian Fork near.....	44
		New Haven, Indiana, Maumee River at.....	175
Mad River, at Eagle City.....	158	New Moorefield, Buck Creek near.....	160
at St. Paris Pike at Eagle City.....	159	East Fork Buck Creek near.....	161
at Tremont City.....	156	New Philadelphia, Home Creek near.....	49
at Zanesfield.....	154	Newark, Licking River near.....	76
near Dayton.....	163	Newcomerstown, Tuscarawas River at.....	54
near Springfield.....	162	Newport, Loramie Creek near.....	147
near Urbana.....	155	Newton Falls, West Branch Mahoning River near.....	21
Madison, Grand River near.....	205	Newville, Indiana, St. Joseph River near.....	173
Mahoning River, at Alliance.....	14	Nimishillen Creek, at North Industry.....	42
at Leavittsburg.....	23	Middle Branch, at Canton.....	41
at Lowellville.....	27	North Industry, Nimishillen Creek at.....	42
at Prickettown.....	17	Norwalk Creek near Norwalk.....	216
at Youngstown.....	25		
below Berlin Dam, near Berlin Center.....	16	O'Shaughnessy Reservoir, contents of.....	120, 121
West Branch, below Michael J. Kirwan Dam,		Ohio Brush Creek basin, crest-stage partial	
at Wayland.....	20	record stations in.....	214
near Newton Falls.....	21	Ohio Brush Creek near West Union.....	123
near Ravenna.....	19	Ohio Canal at Independence.....	201
Mansfield, Touby Run at.....	56	Ohio River basin, crest-stage partial-record	
Map of Ohio.....	Inside back cover	stations in.....	213-215
Marathon, East Fork Little Miami River near.....	134	discharge measurements at miscellaneous	217-218
Marion, Little Scioto River above.....	96	sites in.....	14-172
Massies Creek at Wilberforce.....	126	gaging-station records in.....	208-211
Massillon, Tuscarawas River at.....	39	low-flow partial-record stations in.....	
Maumee River, at Antwerp.....	176	Old Portage, Cuyahoga River at.....	199
at New Haven, Indiana.....	175	Oldtown, Little Miami River near.....	125
at Waterville.....	184	Olentangy River, at Claridon.....	100
near Defiance.....	183	near Delaware.....	102
McConnellsville, Muskingum River at.....	78	near Worthington.....	103
McGaw, Upper Twin Creek at.....	122	Order, downstream, and station numbers.....	4
McGuire Creek below Leesville Dam, near		Other data available.....	10
Leesville.....	43	Ottawa River at Allentown.....	180
Meander Creek Reservoir, contents of.....	29, 30	Otter Fork near Centerburg.....	213
Mexico, Sandusky River near.....	189		
Miamisburg, Great Miami River at.....	166	Paint Creek, below Paint Creek Dam,	
Michael J. Kirwan (West Branch) Reservoir,		near Bainbridge.....	115
contents of.....	29, 30	East Fork, near Sedalia.....	214
Mifflin, Black Fork near.....	55	near Bourneville.....	117
Milan, Huron River at.....	191	near Greenfield.....	114
Milford, Little Miami River at.....	133	Pancoatburg, Deer Creek near.....	111
Mill Creek basin, gaging-station records in.....	140-143	Partial-record station, definition of.....	3
reservoir in.....	141	Patterson Run near Owensville.....	215
Mill Creek (Beaver River basin), at Youngstown,		Perintown, East Fork Little Miami River at.....	138
near Berlin Center.....	26	Shayler Run near.....	137
Mill Creek (Mill Creek basin), at Carthage.....	143	Perryville, Clear Fork near.....	59
at Reading.....	140	Phalanx Station, Eagle Creek at.....	22
West Fork, at Woodlawn.....	142	Piedmont, Stillwater Creek at.....	50
Mill Creek (Muskingum River basin)		Piedmont Reservoir, contents of.....	79, 82
near Coshocton.....	66	Plainville, Little Miami River at.....	139
Mill Creek (Scioto River basin) near Bellepoint		Pleasant Hill, Stillwater River at.....	152
Mill Creek (tributary to Grand River)		Pleasant Hill Reservoir, contents of.....	80, 82
near Jefferson.....	204	Plum Creek at Oberlin.....	216
Millers Ditch at Tipp City.....	215	Poplar Creek near Vandalia.....	215
Millwood, Kokosing River at.....	63	Portage River, at Woodville.....	185
Milton Reservoir, contents of.....	29, 30	Middle Branch, at Mermill.....	211
Mogadore, Little Cuyahoga River at.....	196	South Branch, near Six Points.....	211
Mohawk Reservoir, contents of.....	80, 83	Powers, Bean Creek at.....	177
Mohican River at Greer.....	61	Prickettown, Kale Creek near.....	18
Mohicanville, Lake Fork near.....	60	Mahoning River at.....	17
Mohicanville Reservoir, contents of.....	80, 83	Prospect, Scioto River near.....	97
Monday Creek at Doanville.....	209	Publications.....	9
Montville Ditch at Montville.....	216	Pymatuning Creek at Kinsman.....	28
Moore Run near Eagle City.....	157		
Mosquito Creek below Mosquito Creek Dam,		Raccoon Creek at Adamsville.....	95
near Cortland.....	24	near Prattsville.....	209
Mosquito Creek Reservoir, contents of.....	29, 30	Raccoon Creek basin, gaging-station records in.....	92-95
Mount Sterling, Deer Creek at.....	110	low-flow partial-record stations in.....	209
Mount Vernon, Kokosing River at.....	62	Rattlesnake Creek near New Petersburg.....	210
Moxahala Creek, at Roberts.....	209	Ravenna, West Branch Mahoning River near.....	19
at Roseville.....	209, 213	Ray Run near Moscow.....	215
near Zanesville.....	209	Reading, Mill Creek at.....	140
Muskingum River, at Dresden.....	73	Records of discharge collected by agencies	
at McConnellsville.....	78	other than the Geological Survey.....	11
near Coshocton.....	67	Rees, Big Walnut Creek at.....	108

Reitz Run at Waterville.....	Page 216	Senecaville, Seneca Fork near.....	Page 68
Reservoirs:		Senecaville Reservoir, contents of.....	80, 83
Atwood Reservoir.....	79, 81	Sevenmile Creek, at Camden.....	218
Beach City Reservoir.....	79, 82	at Collinsville.....	169
Berlin Reservoir.....	29, 30	Shade River near Chester.....	91
Bolivar Reservoir.....	79, 81	Shawnee Creek at Xenia.....	215
Burr Oak Reservoir.....	88	Shayler Run near Perintown.....	137
Charles Mill Reservoir.....	80, 82	Short Creek near Dillonvale.....	33
Clendening Reservoir.....	79, 82	Sidney, Great Miami River at.....	146
Deer Creek Reservoir.....	120, 121	Special networks and programs.....	3
Delaware Reservoir.....	120, 121	Spencer Creek at Barnesville.....	213
Dillon Reservoir.....	81, 83	Spring Creek near Troy.....	217
Dover Reservoir.....	79, 81	Spring Valley, Little Miami River near.....	127
Griggs Reservoir.....	120, 121	Springfield, Mad River near.....	162
Hoover Reservoir.....	120, 121	Springfield Lake Outlet at Akron.....	198
Leesville Reservoir.....	79, 81	Stage-discharge relation, definition of.....	3
Meander Creek Reservoir.....	29, 30	Station numbers.....	4
Michael J. Kirwan Reservoir.....	29, 30	Stillwater Creek, at Piedmont.....	50
Milton Reservoir.....	29, 30	at Tippecanoe.....	51
Mohawk Reservoir.....	80, 83	at Uhrichsville.....	52
Mohicanville Reservoir.....	80, 83	Stillwater River, at Englewood.....	153
Mosquito Creek Reservoir.....	29, 30	at Pleasant Hill.....	152
O'Shaughnessy Reservoir.....	120, 121	at Webster.....	210
Piedmont Reservoir.....	79, 82	Stony Creek near De Graff.....	145
Pleasant Hill Reservoir.....	80, 82	Strasburg, Sugar Creek at.....	48
Salt Fork Reservoir.....	80, 83	Stryker, Tiffin River at.....	178
Senecaville Reservoir.....	80, 83	Sugar Creek, above Beach City Dam, at	
Tappan Reservoir.....	80, 82	Beach City.....	46
West Fork Mill Creek Reservoir.....	141	at Strasburg.....	48
Willis Creek Reservoir.....	81, 83	below Beach City Dam, near Beach City.....	47
Roachester, Todd Fork near.....	132	Sunday Creek at Glouster.....	89
Rockbridge, Clear Creek near.....	86	Sunfish Creek (Scioto River basin) near Piketon	210
Rocky Fork near Barretts Mills.....	116	Sunfish Creek (Sunfish Creek basin) at Cameron.	208
Rocky River, near Berea.....	194	Surface-water records.....	14-207
West Branch, at West View.....	212		
Roller Creek at Ohio City.....	216	Tappan, Little Stillwater Creek at.....	53
Rose Run near Portsmouth.....	214	Tappan Reservoir, contents of.....	80, 82
Runoff during 1971 water year compared with		Tar Hollow Creek, at Tar Hollow State Park...	119
median runoff.....	12	West Branch, at Tar Hollow State Park.....	214
Runoff in inches, definition of.....	3	Tar Hollow State Park, Tar Hollow Creek at.....	119
Rush Creek (Hocking River basin) near		Taylorville, Great Miami River at.....	150
Sugar Grove.....	209	Terms, definition of.....	2-3
Rush Creek (Scioto River basin) near LaRue.....	209	Tiderishi Creek near Jenera.....	216
		Tiffin River at Stryker.....	178
St. James Run near Upper Sandusky.....	216	Timber Run near Zanesville.....	209, 213
St. Joseph River, East Branch, near Pioneer....	211	Tinkers Creek at Bedford.....	200
near Newville, Indiana.....	173	Tippecanoe, Stillwater Creek at.....	51
St. Lawrence River basin, crest-stage		Todd Fork near Roachester.....	132
partial-record stations in.....	215-216	Touhy Run at Mansfield.....	56
discharge measurements at miscellaneous		Toussaint Creek near Limestone.....	211
sites in.....	218	Tremont City, Mad River at.....	156
gaging-station records in.....	173-207	Trotwood, Wolf Creek at.....	165
low-flow partial-record stations in.....	211-212	Troy, Great Miami River at.....	149
St. Marys River, at Decatur, Indiana.....	174	Tupper Creek at DeVola.....	214
at Mendon.....	211	Turkey Run, West Branch, near Winchester.....	214
Salt Creek (Muskingum River basin) near		Tuscarawas River, at Clinton.....	37
Chandlersville.....	209	at Massillon.....	39
Salt Creek (Scioto River basin), above damsite		at Newcomerstown.....	54
near Londonderry.....	210, 214	below Dover Dam, near Dover.....	45
at Tarlton.....	210, 214	near East Liberty.....	208
Salt Fork below Salt Fork Dam, near Cambridge..	70	near Port Washington.....	217
Salt Fork Reservoir, contents of.....	80, 83	Twin Creek, near Germantown.....	168
Sandusky River, near Bucyrus.....	186	near Ingomar.....	167
near Fremont.....	190	Tymochtee Creek at Crawford.....	188
near Mexico.....	189		
near Upper Sandusky.....	187	Uhrichsville, Stillwater Creek at.....	52
Sandy Creek at Waynesburg.....	40	Upper Sandusky, Sandusky River near.....	187
Sandy Run, above Big Four Hollow Creek, near		Upper Twin Creek at McGaw.....	122
Lake Hope.....	92	Urbana, Mad River near.....	155
near Lake Hope.....	94	Utica, North Fork Licking River at.....	75
Scioto Big Run at Briggsdale.....	214		
Scioto Brush Creek at Rushtown.....	210	Vermilion, Vermilion River near.....	192
Scioto River, at Chillicothe.....	113	Vermilion River, at Clarksfield.....	212
at Columbus.....	104	near Vermilion.....	192
at Higby.....	118		
at Lucasville.....	217	WRD, definition of.....	3
below O'Shaughnessy Dam, near Dublin.....	99	WSP, definition of.....	3
near Kenton.....	209	Wabash River near New Corydon, Indiana.....	172
near Prospect.....	97	Wakatomita Creek near Frazeyburg.....	72
Scioto River at Chillicothe, runoff during		Walhonding River below Mohawk Dam, at Nellie...	64
1971 water year, graph of.....	12	Walnut Creek (Beaver River basin) at Cortland..	213
Scioto River basin, crest-stage partial-record		Walnut Creek (Scioto River basin) near Ashville	210
stations in.....	214	Waterville, Maumee River at.....	184
discharge measurements at miscellaneous		Wayland, West Branch Mahoning River at.....	20
sites in.....	217	Wayne Creek at Waynesville.....	215
gaging-station records in.....	96-119	Waynesburg, Sandy Creek at.....	40
low-flow partial-record stations in.....	209-210	Wellman, Caesar Creek near.....	131
reservoirs in.....	120-121	West Channel Cedar Run near Tremont City.....	217
Selected references.....	11	West Fork Mill Creek Reservoir, contents of....	141
Seneca Fork below Senecaville Dam, near		West Union, Ohio Brush Creek near.....	123
Senecaville.....	68	Wheeling Creek at Brookside.....	208

INDEX		223
	Page	Page
Whetstone Creek (Muskingum River basin)		81, 83
near Olivesburg.....	213	210
Whetstone Creek (Scioto River basin)		175
near Ashley.....	101	
Whiteoak Creek basin, crest-stage		212, 216
partial-record stations in.....	215	212, 216
gaging station records in.....	124	142
Whiteoak Creek near Georgetown.....	124	185
Whitewater River, at Brookville, Indiana.....	171	103
near Hooven.....	218	
Wilberforce, Massies Creek at.....	126	128
Williamsburg, East Fork Little Miami River at..	135	
Williamsport, Deer Creek at.....	112	32
Willoughby, Chagrin River at.....	203	208
Wills Creek, at Cambridge.....	69	25
below Wills Creek Dam, at Wills Creek.....	71	26
Wills Creek, Wills Creek at.....	71	
Wills Creek Reservoir, contents of.....		81, 83
Wolf Creek (Great Miami River basin), at Dayton		210
at Trotwood.....		175
Wolf Creek (tributary to Lake Erie), at		
Bettsville.....		212, 216
East Branch, at Fort Seneca.....		212, 216
Woodlawn, West Fork Mill Creek at.....		142
Woodville, Portage River at.....		185
Worthington, Olentangy River near.....		103
Xenia, Caesar Creek near.....		128
Yellow Creek, near Hammondsville.....		32
North Fork, at Hammondsville.....		208
Youngstown, Mahoning River at.....		25
Mill Creek at.....		26
Zanesfield, Mad River at.....		15



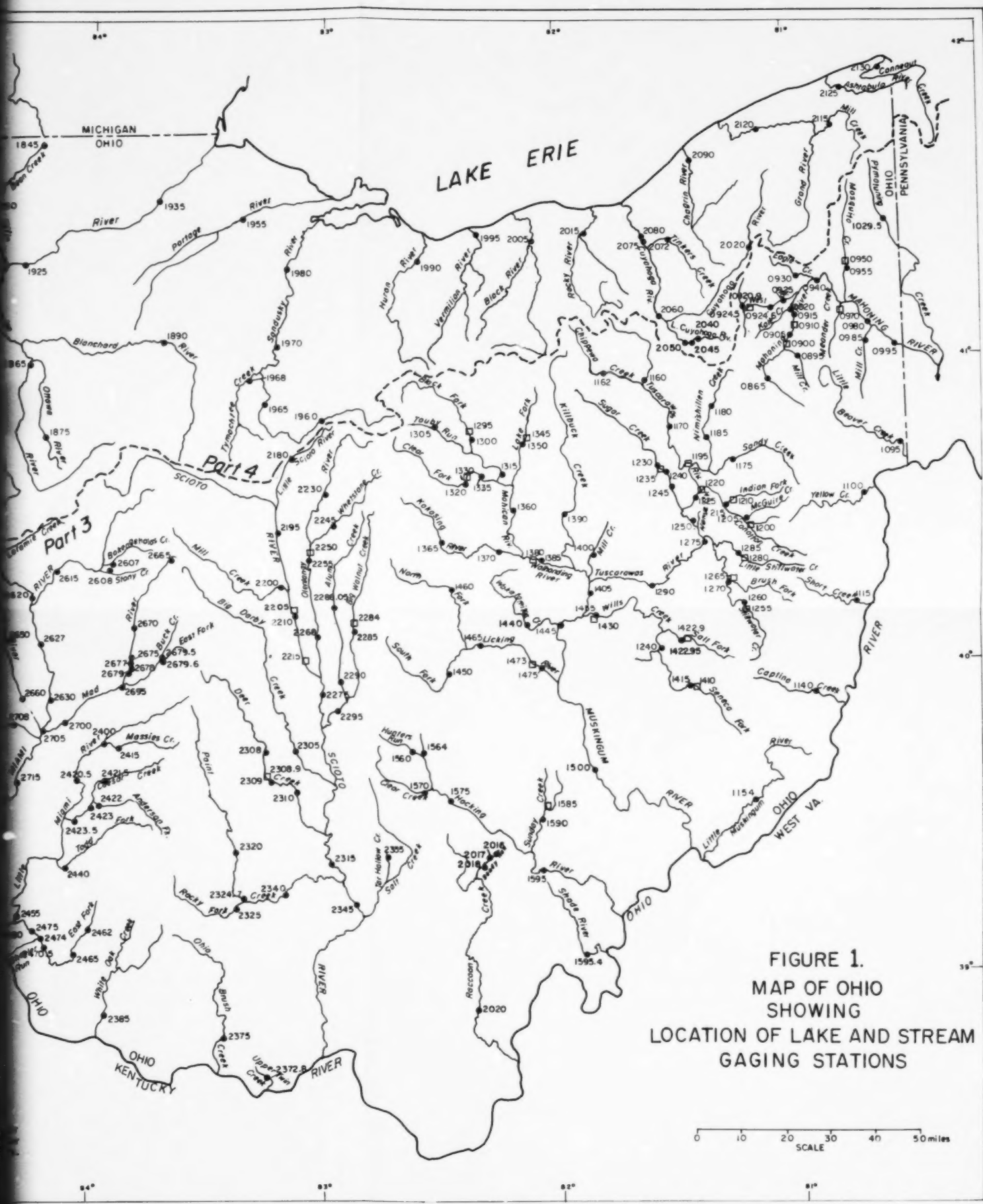


FIGURE 1.
MAP OF OHIO
SHOWING
LOCATION OF LAKE AND STREAM
GAGING STATIONS

0 10 20 30 40 50 miles
SCALE